

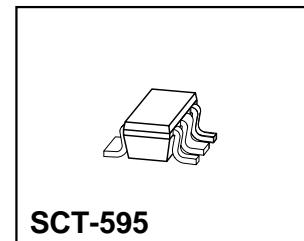


## Short Description

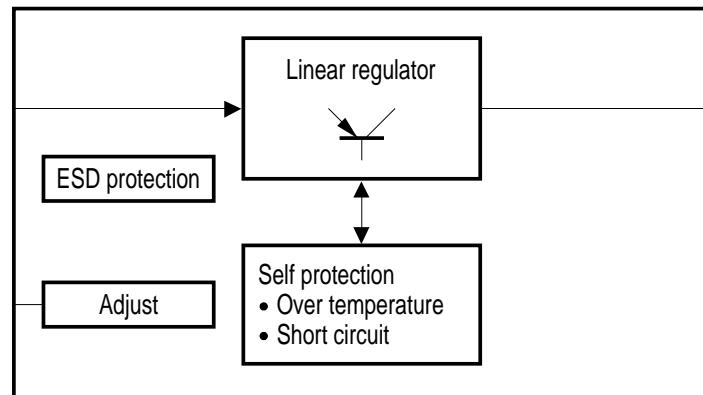
### Features

- Very low-drop voltage tracker
- Adjust input
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection

**TLE 4250**



### Block Diagram



AEB02558

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	50	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	- 0.3 to 45	V
Output current	$I_Q$	0.10	A
Junction temperature	$T_j$	- 40 to 150	°C

### Electrical Characteristics

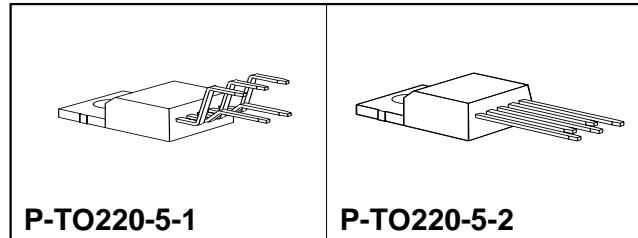
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage tracking	$\Delta V_Q$	- 25	-	+ 25	mV	-
Accuracy	-	- 5	-	+ 5	mV	-
Drop voltage	$V_{Dr}$	-	0.2	0.6	V	$I_Q = 20 \text{ mA}$
Quiescent current	$I_q$	-	55	100	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	-	0	1	$\mu\text{A}$	-

## Short Description

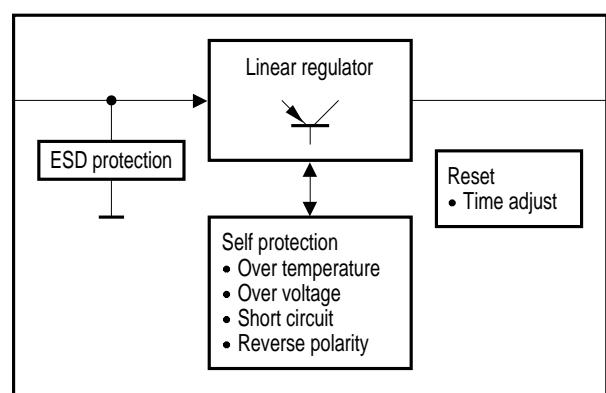
TLE 4260

### Features

- Low-drop voltage regulator
- Adjustable reset time
- Reverse polarity proof
- Excellent behavior
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Over voltage protection
- ESD protection > 4000 V



Block Diagram



AEB02100

Type	Ordering Code	Package
▼ TLE 4260	Q67000-A8187	P-TO220-5-1
▼ TLE 4260 S	Q67000-A9044	P-TO220-5-2

▼ Not for new design, see TLE 4270

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	40	V
Output current	$I_Q$	500	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	-42 to 65	V
Output current	$I_Q$	1.4	A
Junction temperature	$T_j$	-40 to 150	°C

### Electrical Characteristics

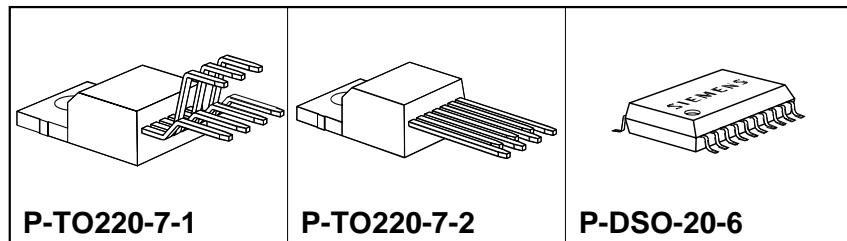
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.75	5.00	5.25	V	-
Accuracy	-	-5	-	5	%	-
Drop voltage	$V_{Dr}$	-	0.2	0.5	V	$I_Q = 0.5 \text{ A}$
Quiescent current	$I_q$	-	500	700	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

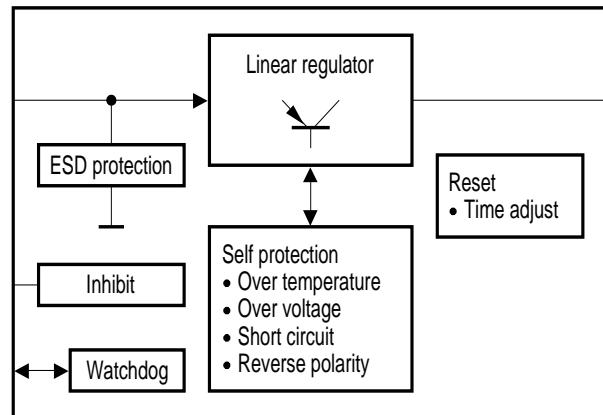
TLE 4261

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Over voltage protection
- Adjustable reset time
- Reverse polarity proof
- Inhibit input
- Watchdog circuit
- Reset function down to 1 V  
(output voltage)



### Block Diagram



AEB02101

Type	Ordering Code	Package
▼ TLE 4261	Q67000-A9003	P-TO220-7-1
▼ TLE 4261 G	Q67006-A9059	P-DSO-20-6
▼ TLE 4261 S	Q67000-A9109	P-TO220-7-2

■ SMD = Surface Mounted Device

▼ Not for new design, see TLE 4271

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	40		V
Output current	$I_Q$	500		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	– 42 to 65		V
Output current	$I_Q$	1.6		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

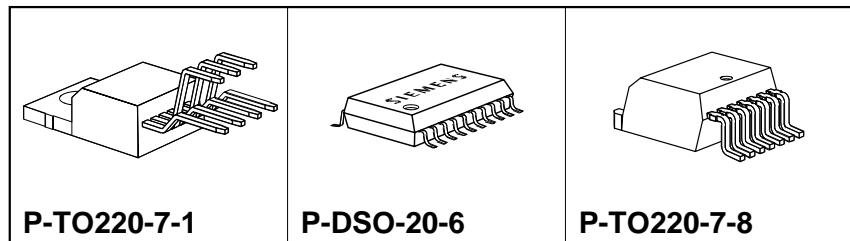
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.75	5.00	5.25	V	–
Accuracy	–	– 5	–	+ 5	%	–
Drop voltage	$V_{Dr}$	–	0.35	0.5	V	$I_Q = 0.5 \text{ A}$
Quiescent current (OFF mode)	$I_q$	–	–	50	μA	–

## Short Description

**TLE 4261-2**

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Over voltage protection
- Adjustable reset time
- Reverse polarity proof
- Inhibit input
- Watchdog circuit
- Reset function down to 1 V  
(output voltage)

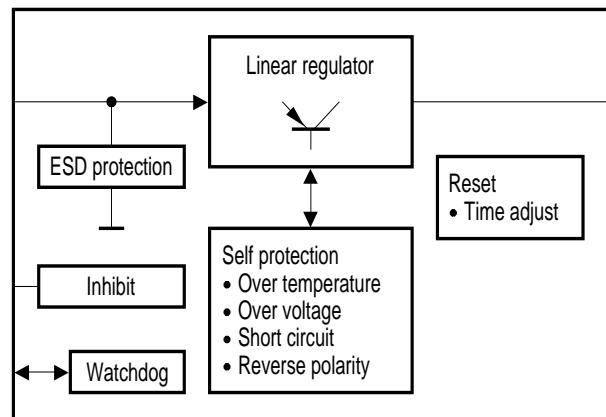


P-TO220-7-1

P-DSO-20-6

P-TO220-7-8

### Block Diagram



AEB02101

Type	Ordering Code	Package
▼ TLE 4261-2	Q67000-A9110	P-TO220-7-1
▼ TLE 4261-2 G	Q67000-A9140	P-DSO-20-6
▼ TLE 4261-2 GL	Q67006-A9193	P-TO220-7-8

■ SMD = Surface Mounted Device

▼ Not for new design, see TLE 4271

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	40		V
Output current	$I_Q$	500		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	– 42 to 65		V
Output current	$I_Q$	1.6		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

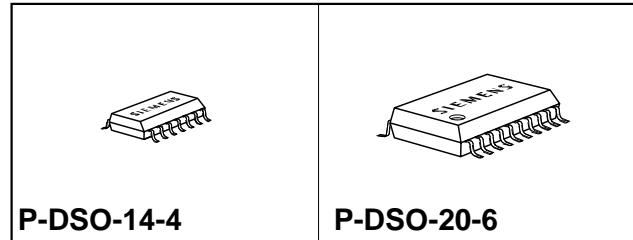
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.9	5.00	5.1	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.35	0.5	V	$I_Q = 0.5 \text{ A}$
Quiescent current (OFF mode)	$I_q$	–	–	50	$\mu\text{A}$	–

## Short Description

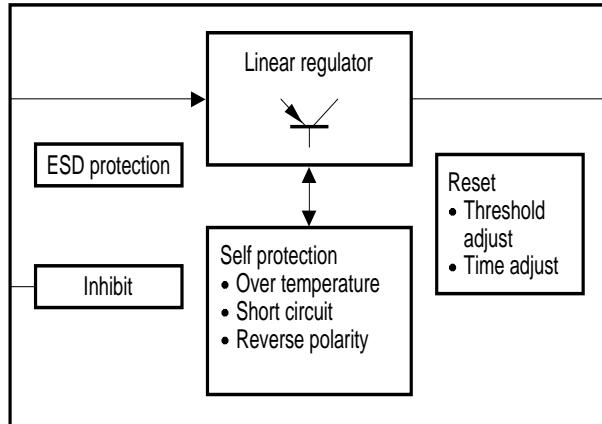
TLE 4262

### Features

- Low-drop voltage regulator
- Excellent behavior
- Adjustable reset time
- Adjustable reset threshold
- Reverse polarity proof
- Inhibit input
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reset function down to 1 V (output voltage)



### Block Diagram



AEB02102

Type	Ordering Code	Package
TLE 4262 G	Q67006-A9068	P-DSO-20-6
▼ TLE 4262 GM	Q67006-A9356	P-DSO-14-4

▀ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	200	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	-42 to 45	V
Output current	$I_Q$	0.5	A
Junction temperature	$T_j$	-40 to 150	°C

### Electrical Characteristics

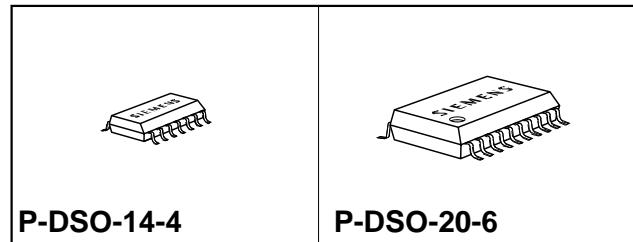
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	-
Accuracy	-	-2	-	+2	%	-
Drop voltage	$V_{Dr}$	-	0.25	0.5	V	$I_Q = 150 \text{ mA}$
Quiescent current	$I_q$	-	720	900	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	-	0	10	$\mu\text{A}$	-

## Short Description

TLE 4263

### Features

- Low-drop voltage regulator
- Excellent EMV behavior
- Adjustable reset time
- Adjustable reset threshold
- Reverse polarity proof
- Inhibit input
- Watchdog circuit
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reset funktion down to 1 V (output voltage)

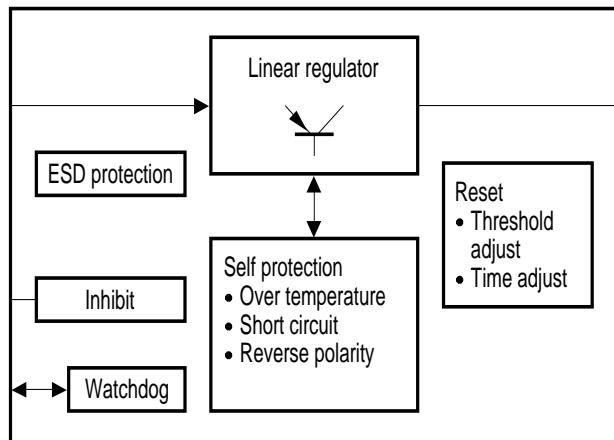


Type	Ordering Code	Package
TLE 4263 G	Q67006-A9095	P-DSO-20-6
▼ TLE 4263 GM	Q67006-A9357	P-DSO-14-4

▼ SMD = Surface Mounted Device

▼ New type

### Block Diagram



AEB02103

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	200	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	– 42 to 45	V
Output current	$I_Q$	0.5	A
Junction temperature	$T_j$	– 40 to 150	°C

### Electrical Characteristics

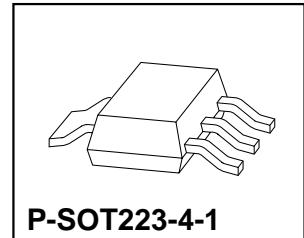
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.35	0.5	V	$I_Q = 150 \text{ mA}$
Quiescent current	$I_q$	–	850	1100	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	–	0	10	$\mu\text{A}$	–

## Short Description

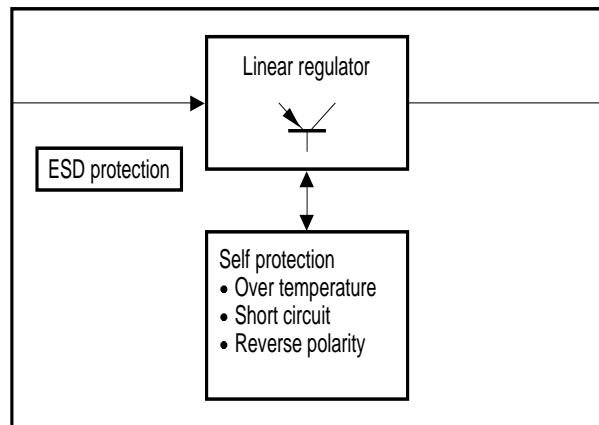
TLE 4264

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reverse polarity proof



### Block Diagram



Type	Ordering Code	Package
TLE 4264 G	Q67006-A9139	P-SOT223-4-1

SMD = Surface Mounted Device

AEB02104

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	120	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	– 42 to 45	V
Output current	$I_Q$	0.5	A
Junction temperature	$T_j$	– 40 to 150	°C

### Electrical Characteristics

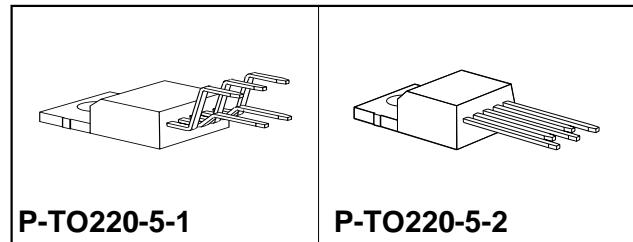
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 100 \text{ mA}$
Quiescent current	$I_q$	–	250	400	μA	$I_Q = 1 \text{ mA}$

## Short Description

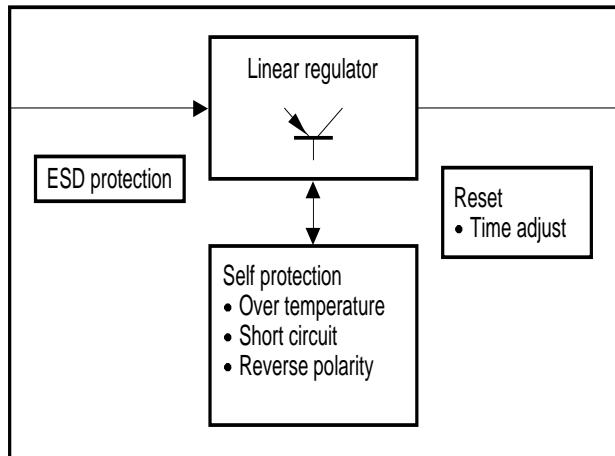
TLE 4265

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Adjustable reset time
- Reverse polarity proof
- Reset function down to 1V (output voltage)



### Block Diagram



AEB02105

Type	Ordering Code	Package
TLE 4265	Q67000-A9138	P-TO220-5-1
TLE 4265 S	Q67000-A9277	P-TO229-5-2

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	45	V
Output current	$I_Q$	200	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	– 42 to 45	V
Output current	$I_Q$	0.5	A
Junction temperature	$T_j$	– 40 to 150	°C

### Electrical Characteristics

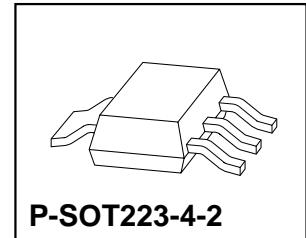
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 150 \text{ mA}$
Quiescent current	$I_q$	–	720	900	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

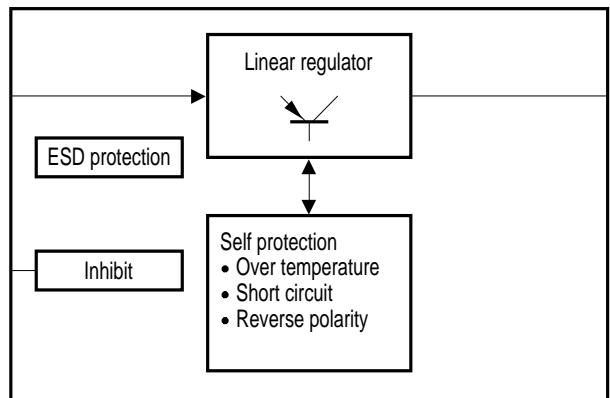
TLE 4266

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Inhibit input
- Reverse polarity proof



### Block Diagram



AEB02106

Type	Ordering Code	Package
TLE 4266 G	Q67006-A9152	P-SOT223-4-2
▼ TLE 4266 GSV10	Q67006-A9355	P-SOT223-4-2

▼ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	120	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	– 42 to 45	V
Output current	$I_Q$	0.5	A
Junction temperature	$T_j$	– 40 to 150	°C

### Electrical Characteristics

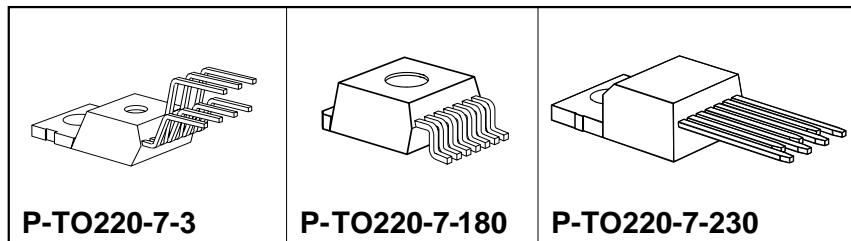
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Output voltage GSV 10	$V_Q$	9.80	10.0	10.2	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 100 \text{ mA}$
Quiescent current	$I_q$	–	250	400	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	–	0	10	$\mu\text{A}$	–

## Short Description

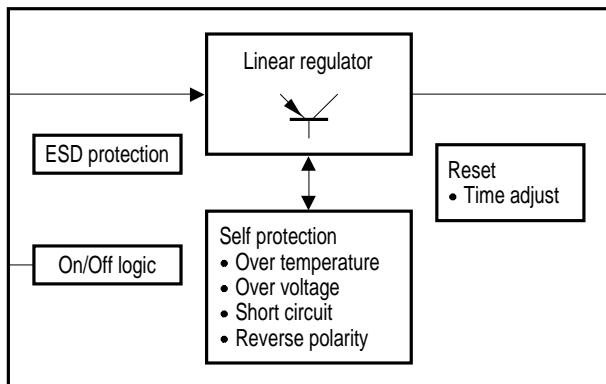
TLE 4267

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Over voltage protection
- Adjustable reset time
- Reverse polarity proof
- On/Off logic
- ESD protection > 2000 V
- Reset function down to 1 V (output voltage)



### Block Diagram



AEB02107

Type	Ordering Code	Package
TLE 4267	Q67000-A9153	P-TO220-7-3
TLE 4267 G	Q67006-A9169	P-TO220-7-180
TLE 4267 S	Q67000-A9246	P-TO220-7-230

SMD = Surface Mounted Device

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	42	V
Output current	$I_Q$	400	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	- 42 to 65	V
Output current	$I_Q$	1.0	A
Junction temperature	$T_j$	- 40 to 150	°C

### Electrical Characteristics

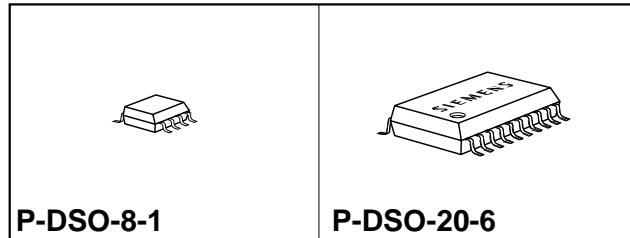
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	-
Accuracy	-	- 2	-	+ 2	%	-
Drop voltage	$V_{Dr}$	-	0.35	0.5	V	$I_Q = 400 \text{ mA}$
Quiescent current	$I_q$	-	1300	-	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	-	0	20	$\mu\text{A}$	-

## Short Description

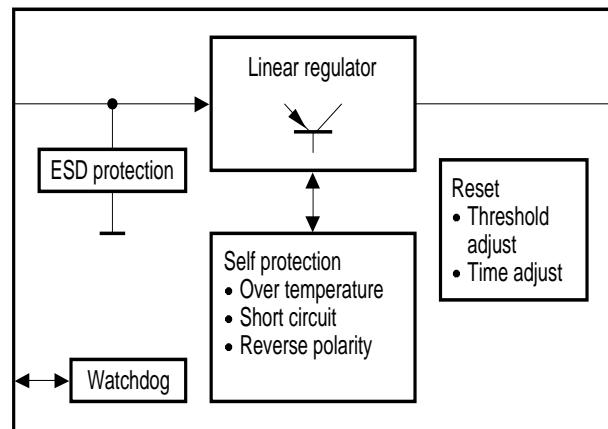
TLE 4268

### Features

- Low-drop voltage regulator
- Adjustable reset time
- Adjustable reset threshold
- Reverse polarity proof
- Load dependent watchdog circuit
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- ESD protection > 4000 V
- Reset function down to 1 V (output voltage)



### Block Diagram



Type	Ordering Code	Package
TLE 4268 GS	Q67006-A9229	P-DSO-8-1
TLE 4268 G	Q67006-A9146	P-DSO-20-6

SMD = Surface Mounted Device

AEB02108

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	45		V
Output current	$I_Q$	200		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	– 42 to 45		V
Output current	$I_Q$	0.5		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

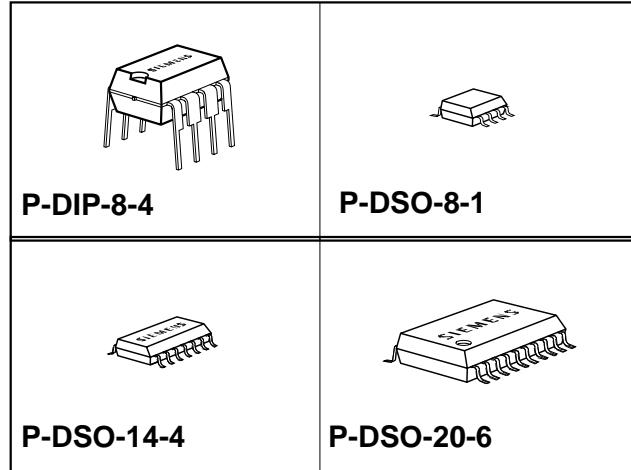
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 150 \text{ A}$
Quiescent current	$I_q$	–	270	400	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4269

### Features

- Low-drop voltage regulator
- Early warning
- Adjustable reset time
- Adjustable reset threshold
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reverse polarity proof
- ESD protection > 2000 V
- Reset function down to 1 V (output voltage)
- Integrated pull up resistors at logic outputs



Type	Ordering Code	Package
TLE 4269 A	Q67000-A9190	P-DIP-8-4
TLE 4269 G	Q67006-A9173	P-DSO-8-1
TLE 4269 GM	Q67006-A9288	P-DSO-14-4
TLE 4269 GL	Q67006-A9192	P-DSO-20-6

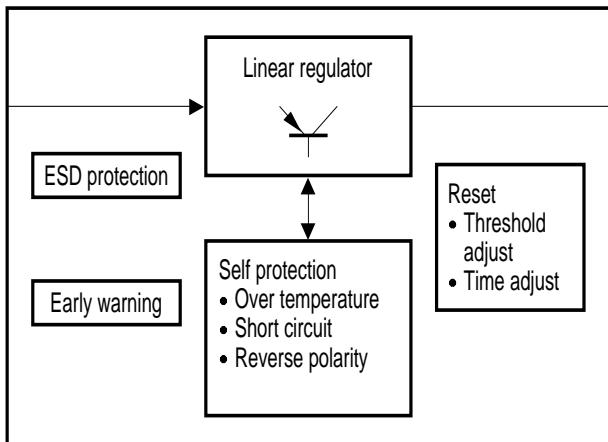
▀ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	150	mA

### Block Diagram



AEB02109

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	– 42 to 45		V
Output current	$I_Q$	0.5		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

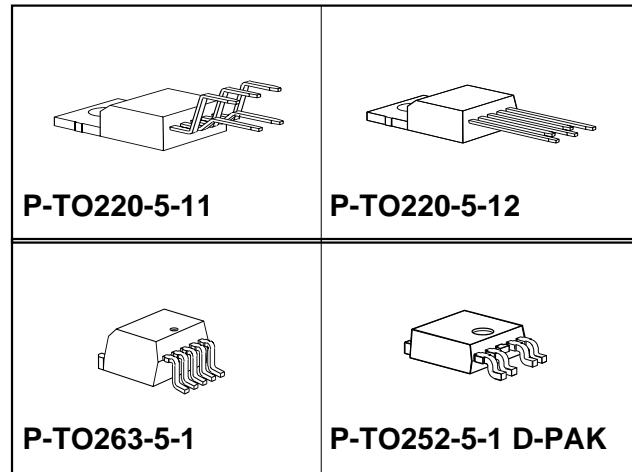
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 120 \text{ mA}$
Quiescent current	$I_q$	–	150	300	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4270

### Features

- Low-drop voltage regulator
- Adjustable reset time
- Reverse polarity proof
- Excellent behavior
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Over voltage protection
- ESD protection > 4000 V
- Reset function down to 1 V (output voltage)



Type	Ordering Code	Package
TLE 4270	Q67000-A9209	P-TO220-5-11
TLE 4270 S	Q67000-A9243	P-TO220-5-12
TLE 4270 G	Q67006-A9201	P-TO263-5-1
▼ TLE 4270 D	Q67006-A9360	P-TO252-5-1

▀ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	42	V
Output current	$I_Q$	600	mA

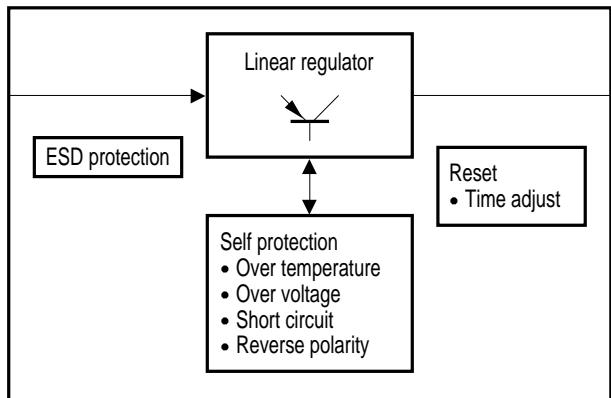
### Absolute Maximum Ratings

Parameter	Symbol	Limit Values			Unit
		min.	typ.	max.	
Supply voltage	$V_S$		– 42 to 65		V
Output current	$I_Q$		1.4		A
Junction temperature	$T_j$		– 40 to 150		°C

### Electrical Characteristics

Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.35	0.5	V	$I_Q = 0.55 \text{ A}$
Quiescent current	$I_q$	–	0.9	1.5	mA	$I_Q = 1 \text{ mA}$

### Block Diagram



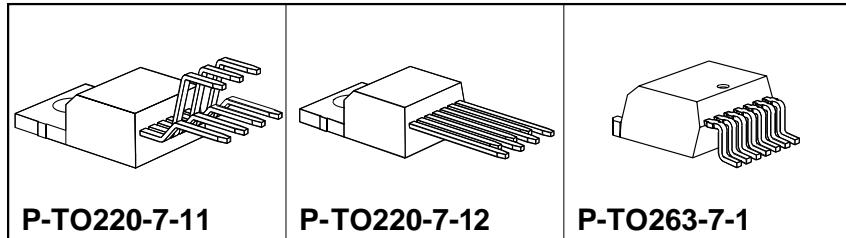
AEB02110

## Short Description

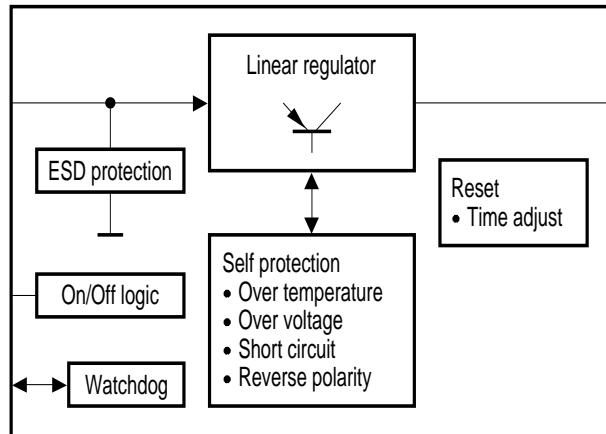
TLE 4271

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Over voltage protection
- Adjustable reset time
- Reverse polarity proof
- Inhibit input
- Watchdog circuit
- Reset function down to 1 V (output voltage)



### Block Diagram



Type	Ordering Code	Package
TLE 4271	Q67000-A9210	P-TO220-7-11
TLE 4271 S	Q67000-A9244	P-TO220-7-2
TLE 4271 G	Q67006-A9195	P-TO263-7-1

SMD = Surface Mounted Device

AEB02111

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	42		V
Output current	$I_Q$	600		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	– 42 to 60		V
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

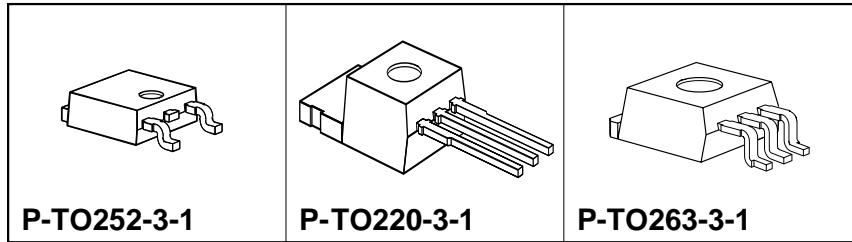
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.35	0.5	V	$I_Q = 0.55 \text{ mA}$
Quiescent current	$I_q$	–	1	1.5	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	–	0	20	$\mu\text{A}$	–

## Short Description

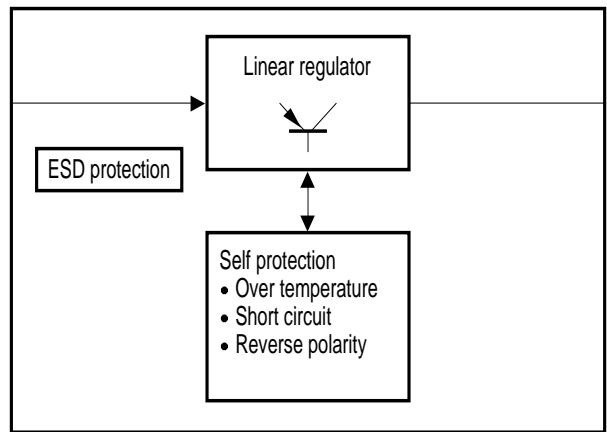
TLE 4274

### Features

- Low drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reverse polarity proof



### Block Diagram



Type	Ordering Code	Package
TLE 4274 V10	Q67000-A9258	P-TO220-3-1
TLE 4274 V50	Q67000-A9256	P-TO220-3-1
TLE 4274 V85	Q67000-A9257	P-TO220-3-1
▼ TLE 4274 DV 50	Q67006-A9331	P-TO252-3-1
TLE 4274 G V10	Q67006-A9261	P-TO263-3-1
TLE 4274 G V50	Q67006-A9259	P-TO263-3-1
TLE 4274 G V85	Q67006-A9260	P-TO263-3-1

▀ SMD = Surface Mounted Device

▼ New type

AEB02104

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	45		V
Output current	$I_Q$	400		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	– 42 to 45		V
Output current	$I_Q$	0.8		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

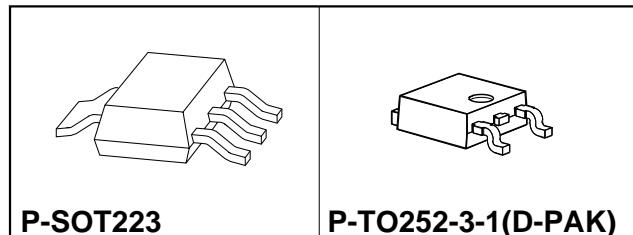
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.80	5.00	5.20	V	–
Accuracy	–	– 4	–	+ 4	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 250 \text{ mA}$
Quiescent current	$I_q$	–	100	200	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4274

### Features

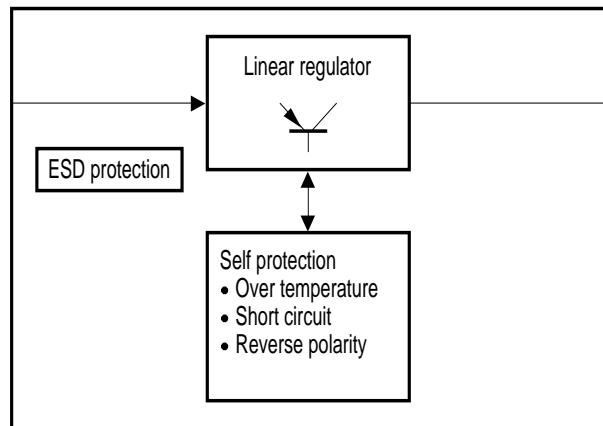
- Voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reverse polarity proof
- 2.5 V, 3.3 V



P-SOT223

P-TO252-3-1(D-PAK)

### Block Diagram



AEB02104

Type	Ordering Code	Package
TLE 4274 GS V33	Q67006-A9289	P-SOT223
▼ TLE 4274 D V33	Q67006-A9348	P-TO252-3-1
▼ TLE 4274 GS V25	Q67006-A9359	P-SOT223

▀ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	400	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	– 42 to 45	V
Output current	$I_Q$	0.8	A
Junction temperature	$T_j$	– 40 to 150	°C

### Electrical Characteristics

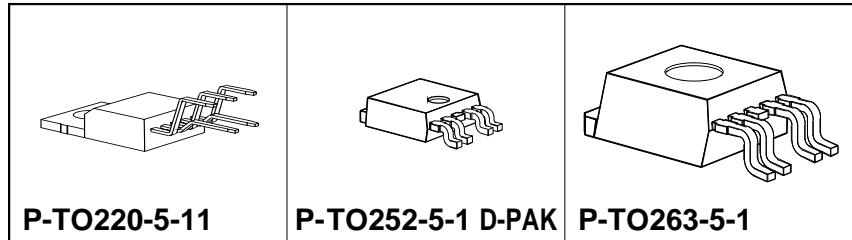
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage GSV 33	$V_Q$	3.17	3.3	3.44	V	–
Output voltage GSV 25	$V_Q$	2.4	2.5	2.6	V	–
Accuracy	–	– 4	–	+ 4	%	–
Drop voltage GSV 33	$V_{Dr}$	–	0.5	1.2	V	$I_Q = 300 \text{ mA}$
Drop voltage GSV 25	$V_{Dr}$	–	1.3	2.0	V	–
Quiescent current	$I_q$	–	100	220	µA	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4275

### Features

- Low-drop voltage regulator
- Adjustable reset time
- Reverse polarity proof
- Excellent behavior
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- ESD protection > 4000 V
- Reset function down to 1 V (output voltage)



Type	Ordering Code	Package
▼ TLE 4275	Q67000-A9342	P-TO220-5-11
▼ TLE 4275 D	Q67006-A9354	P-TO252-5-1
▼ TLE 4275 G	Q67006-A9343	P-TO263-5-1

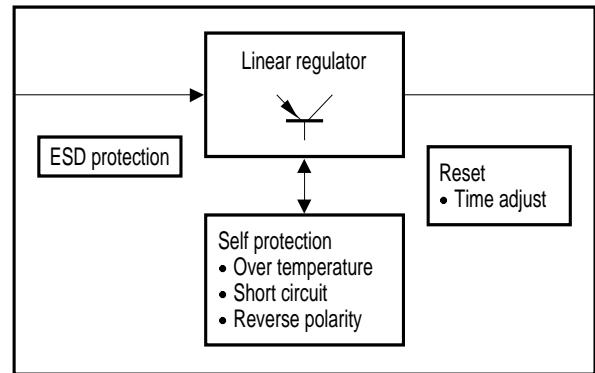
■ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	45	V
Output current	$I_Q$	450	mA

### Block Diagram



AEB02555

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	– 42 to 45		V
Output current	$I_Q$	1.4		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr}$	–	0.25	0.5	V	$I_Q = 300 \text{ mA}$
Quiescent current	$I_q$	–	150	200	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4276

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Inhibit input
- Reverse polarity proof
- 5.0 V, 8.5 V, 10.0 V
- Variable output voltage

Type	Ordering Code	Package
TLE 4276 V50	Q67000-A9262	P-TO220-5-3
TLE 4276 SV50	Q67000-A9267	P-TO220-5-43
TLE 4276 GV50	Q67006-A9266	P-TO220-5-122
TLE 4276 GV85	Q67006-A9268	P-TO220-5-122
TLE 4276 GV10	Q67006-A9270	P-TO220-5-122
TLE 4276 GV	Q67006-A9272	P-TO220-5-122
▼ TLE 4276 DV50	Q67006-A9358	P-TO252-5-1
▼ TLE 4276 DV	Q67006-A9361	P-TO252-5-1

■ SMD = Surface Mounted Device

▼ New type

### Operating Range

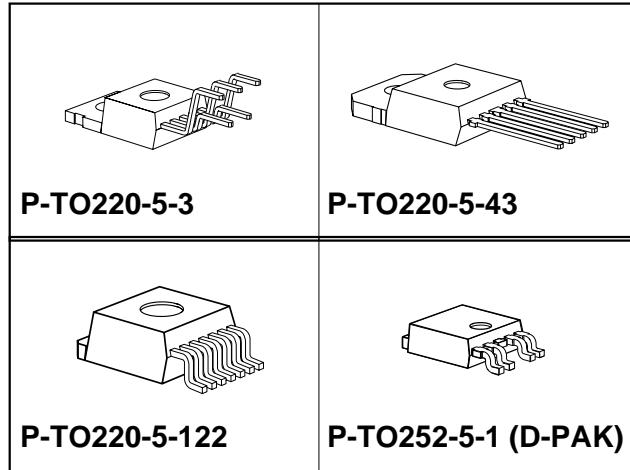
Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	400	mA

### Absolute Maximum Ratings

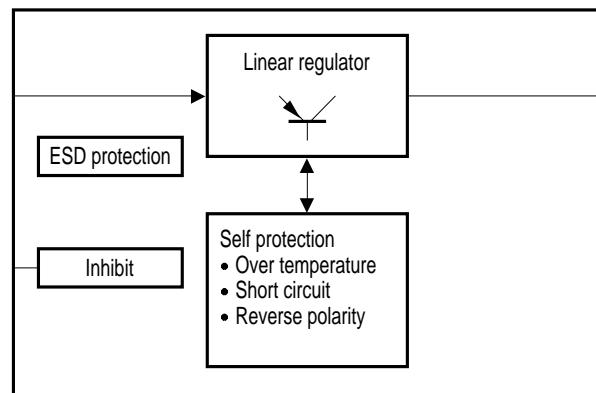
Parameter	Symbol	Limit Values	Unit
Junction temperature	$T_j$	- 40 to 150	°C

### Electrical Characteristics

Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.80	5.00	5.20	V	-
Accuracy	-	- 4	-	+ 4	%	-
Drop voltage	$V_{Dr}$	-	0.25	0.5	V	$I_Q = 300 \text{ A}$
Quiescent current	$I_q$	-	120	220	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	-	0	10	$\mu\text{A}$	-



### Block Diagram



AEB02106

## Short Description

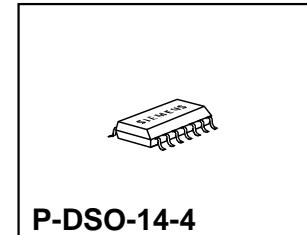
TLE 4278 G

### Features

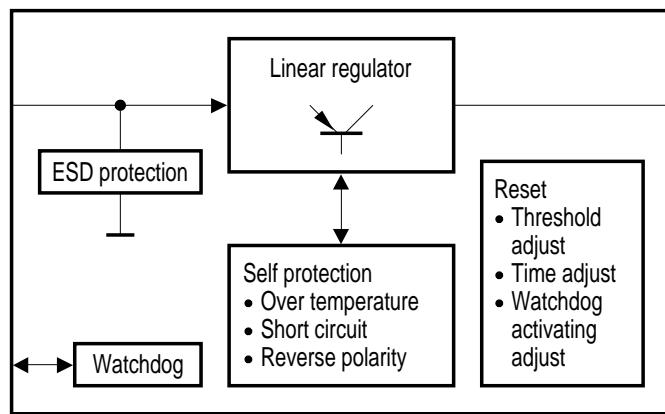
- Low-drop voltage regulator
- Very low quiescent current
- Adjustable reset time
- Adjustable reset threshold
- Reverse polarity proof
- Adjustable watchdog activating threshold
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- ESD protection > 2000 V
- Reset funktion down to 1 V (output voltage)

Type	Ordering Code	Package
TLE 4278 G	Q67006-A9291	P-DSO-14-4

SMD = Surface Mounted Device



### Block Diagram



AEB02556

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	45	V
Output current	$I_Q$	160	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	- 42 to 45	V
Output current	$I_Q$	0.5	A
Junction temperature	$T_j$	- 40 to 150	°C

### Electrical Characteristics

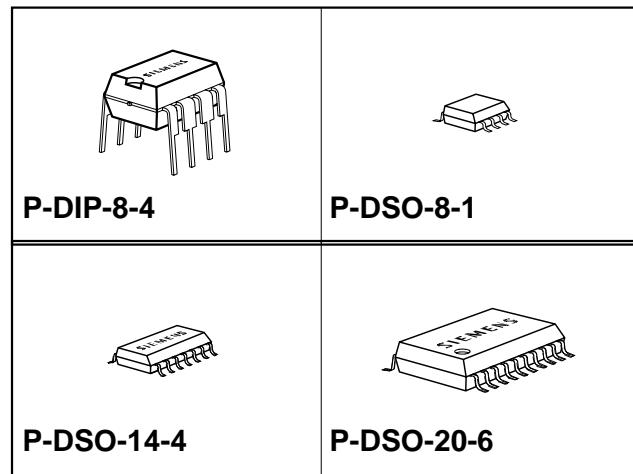
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	-
Accuracy	-	- 2	-	+ 2	%	-
Drop voltage	$V_{Dr}$	-	0.25	0.5	V	$I_Q = 150 \text{ mA}$
Quiescent current	$I_q$	-	175	220	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4279

### Features

- Low-drop voltage regulator
- Early warning
- Adjustable reset time
- Adjustable reset threshold
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Reverse polarity proof
- ESD protection > 2000 V
- Reset function down to 1 V (output voltage)



Type	Ordering Code	Package
TLE 4279 A	on request	P-DIP-8-4
TLE 4279 G	Q67006-A9225	P-DSO-8-1
TLE 4279 GM	Q67006-A9307	P-DSO-14-4
TLE 4279 GL	Q67006-A9306	P-DSO-20-6

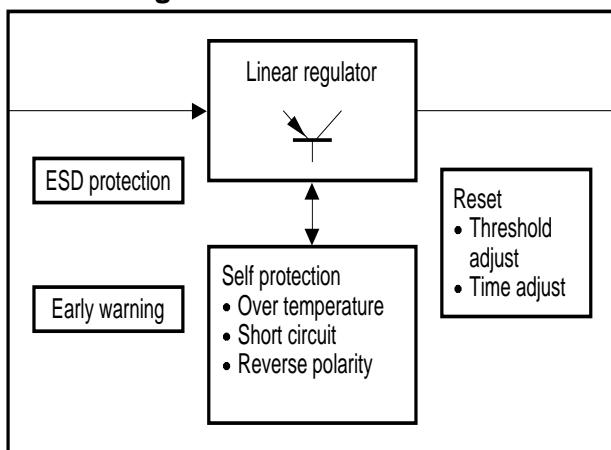
▀ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	150	mA

### Block Diagram



AEB02109

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values			Unit
		min.	typ.	max.	
Supply voltage	$V_s$		- 42 to 45		V
Output current	$I_Q$		0.5		A
Junction temperature	$T_j$		- 40 to 150		°C

### Electrical Characteristics

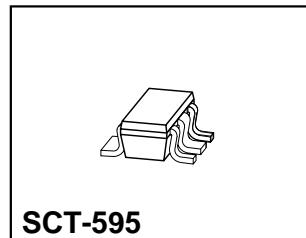
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	-
Accuracy	-	- 2	-	+ 2	%	-
Drop voltage	$V_{Dr}$	-	0.25	0.5	V	$I_Q = 120 \text{ mA}$
Quiescent current	$I_q$	-	150	300	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

TLE 4285 G

### Features

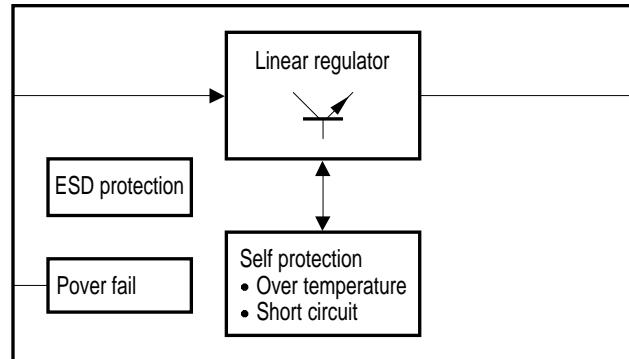
- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Power fail



Type	Ordering Code	Package
TLE 4285 G	Q67006-A9328	SCT-595

SMD = Surface Mounted Device

### Block Diagram



AEB02276

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	45	V
Output current	$I_Q$	10	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Output current	$I_Q$	0.05	A
Supply voltage	$V_S$	- 0.3 to 45	V
Junction temperature	$T_j$	- 40 to 150	°C

### Electrical Characteristics

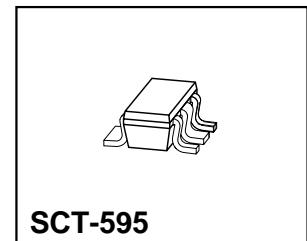
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.80	5.00	5.20	V	-
Accuracy	-	- 4	-	+ 4	%	-
Drop voltage	$V_{Dr}$	-	0.8	1.0	V	$I_Q = 10 \text{ mA}$
Quiescent current	$I_q$	-	80	140	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

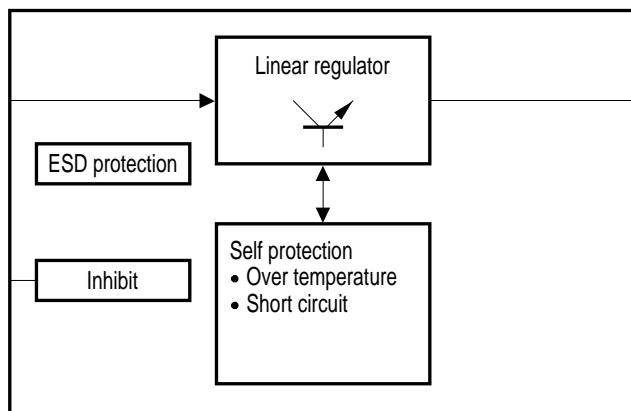
TLE 4286 G

### Features

- Low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Inhibit input



**Block Diagram**



Type	Ordering Code	Package
TLE 4286 G	Q67006-A9304	SCT-595

SMD = Surface Mounted Device

AEB02112

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	45		V
Output current	$I_Q$	10		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	– 0.3 to 45		V
Output current	$I_Q$	0.05		A
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

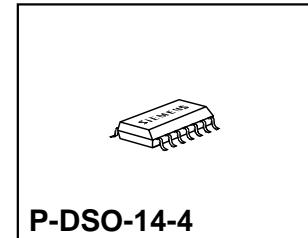
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.80	5.00	5.20	V	–
Accuracy	–	– 4	–	+ 4	%	–
Drop voltage	$V_{Dr}$	–	0.8	1.0	V	$I_Q = 10 \text{ mA}$
Quiescent current	$I_q$	–	55	100	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	–	0	1	$\mu\text{A}$	–

## Short Description

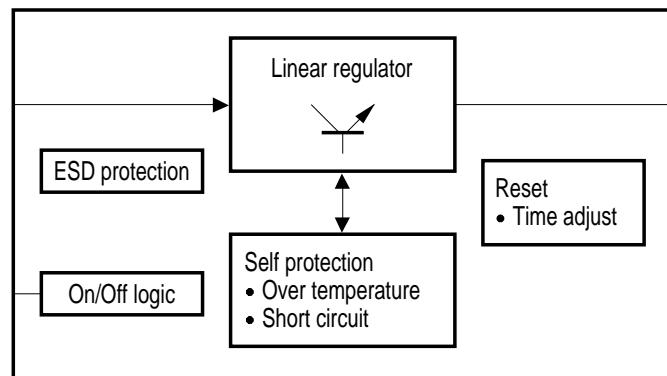
TLE 4287 G

### Features

- Voltage regulator
- Wide operating range
- Extended temperature range
- Short-circuit protection
- Over temperature protection
- Adjustable reset time
- On/Off logic
- ESD protection > 2000 V
- Reset function down to 1 V (output voltage)
- Output stable with  $\geq 100 \text{ nF}$



### Block Diagram



AEB02557

Type	Ordering Code	Package
TLE 4287 G	Q67006-A9286	P-DSO-14-4

▼ SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	45	V
Output current	$I_Q$	300	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_s$	- 42 to 45	V
Output current	$I_Q$	1.0	A
Junction temperature	$T_j$	- 40 to 170	°C

### Electrical Characteristics

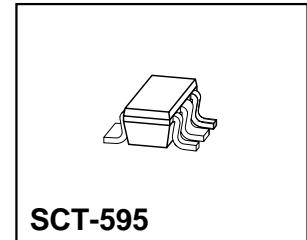
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.90	5.00	5.10	V	-
Accuracy	-	- 2	-	+ 2	%	-
Drop voltage	$V_{Dr}$	-	1.8	2.0	V	$I_Q = 250 \text{ mA}$
Quiescent current	$I_q$	-	2	4	mA	$I_Q = 250 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	-	0	10	$\mu\text{A}$	-

## Short Description

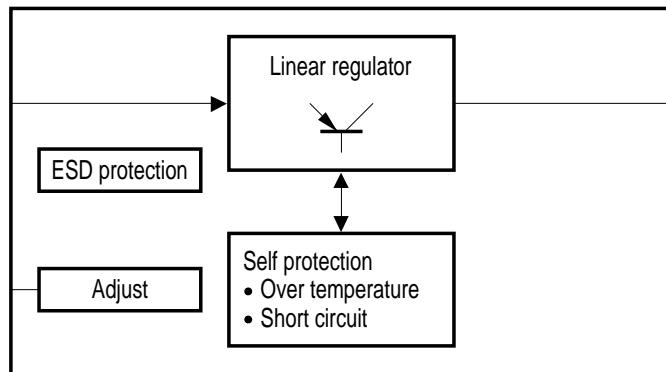
TLE 4296

### Features

- Very low-drop voltage regulator
- Wide operating range
- Wide temperature range
- Short-circuit protection
- Over temperature protection
- Inhibit input



Block Diagram



SMD = Surface Mounted Device

Type	Ordering Code	Package
▼ TLE 4296 GV30	Q67006-A9339	SCT-595
▼ TLE 4296 GV33	Q67006-A9340	SCT-595
▼ TLE 4296 GV50	Q67006-A9372	SCT-595

AEB02558

### Operating Range

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	45	V
Output current	$I_Q$	30	mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values	Unit
Supply voltage	$V_S$	- 0.3 to 45	V
Output current	$I_Q$	0.05	A
Junction temperature	$T_j$	- 40 to 150	°C

### Electrical Characteristics

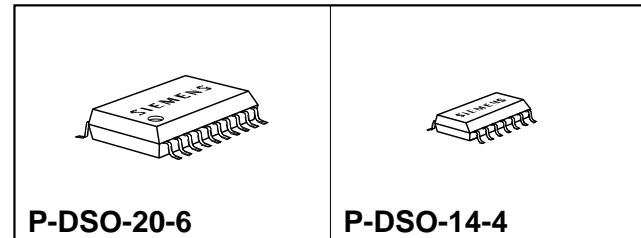
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_Q$	4.80	5.00	5.20	V	-
Accuracy	-	- 4	-	+ 4	%	-
Drop voltage	$V_{Dr}$	-	0.3	0.6	V	$I_Q = 20 \text{ mA}$
Quiescent current	$I_q$	-	55	100	$\mu\text{A}$	$I_Q = 1 \text{ mA}$
Quiescent current (OFF mode)	$I_q$	-	0	1	$\mu\text{A}$	-

## Short Description

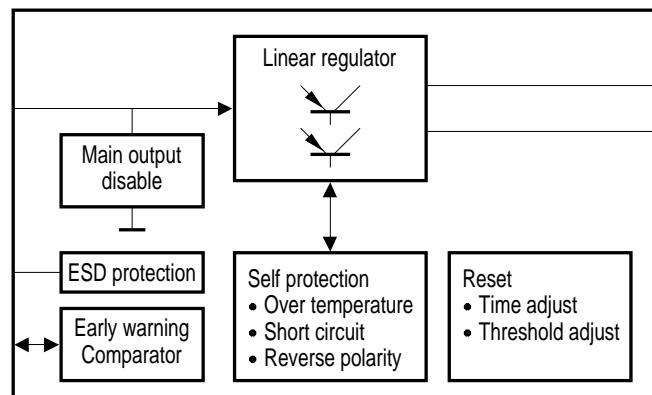
TLE 4470

### Features

- Dual low-drop voltage regulator
- Main output adjustable
- Very low quiescent current consumption
- Early warning comparator
- Adjustable reset time
- Adjustable reset threshold
- Short-circuit protection
- Over temperature protection
- Inhibit disables main output
- Reverse polarity proof
- Reset function down to 1V (output voltage)



### Block Diagram



AEB02278

Type	Ordering Code	Package
TLE 4470 GS	Q67006-A9309	P-DSO-14-4
TLE 4470 G	Q67006-A9308	P-DSO-20-6

SMD = Surface Mounted Device

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	45		V
Output current	$I_{Q1}$	180		mA
Output current	$I_{Q2}$	350		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_S$	– 42 to 45		V
Junction temperature	$T_j$	– 40 to 150		°C

### Electrical Characteristics

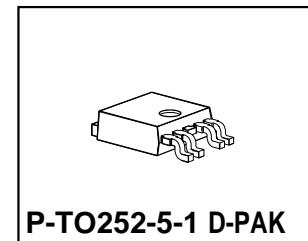
Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage	$V_{Q1}$	4.90	5.00	5.10	V	–
Output voltage main regulator	$V_{Q2}$	$V_{Q1}-25$	–	$V_{Q1}+25$	mV	–
Accuracy	–	– 2	–	+ 2	%	–
Drop voltage	$V_{Dr1}$	–	0.3	0.5	V	$I_Q = 200 \text{ mA}$
Quiescent current main output off	$I_{q1}$	–	100	200	$\mu\text{A}$	$I_Q = 1 \text{ mA}$

## Short Description

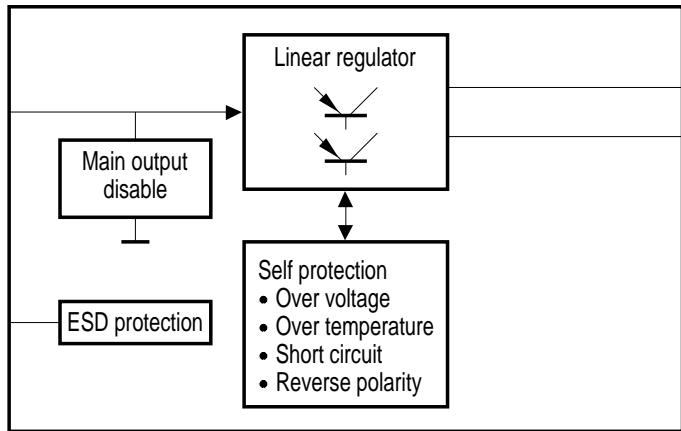
TLE 4476

### Features

- Dual low-drop voltage regulator 5.0 V + 3.3 V
- Extended temperature range
- Overvoltage protection
- Very low quiescent current consumption
- Short-circuit protection
- Over temperature protection
- Inhibit disables main output
- Reverse polarity proof



### Block Diagram



AEB02584

Type	Ordering Code	Package
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▼ TLE 4476 GM Q67006-A9362 P-T0252-5-1

SMD = Surface Mounted Device

▼ New type

### Operating Range

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	42		V
Output current	$I_{Q1}$	250		mA
Output current	$I_{Q2}$	330		mA

### Absolute Maximum Ratings

Parameter	Symbol	Limit Values		Unit
Supply voltage	$V_s$	– 42 to 65		V
Junction temperature	$T_j$	– 40 to 170		°C

### Electrical Characteristics

Parameter	Symbol	Limit Values			Unit	Remarks
		min.	typ.	max.		
Output voltage 1	$V_{Q1}$	4.80	5.00	5.20	V	–
Output voltage 2	$V_{Q2}$	3.17	3.30	3.43	mV	–
Accuracy	–	– 4	–	+ 4	%	–
Drop voltage	$V_{Dr1}$	–	0.3	0.5	V	$I_Q = 200 \text{ mA}$
Quiescent current main output off	$I_{q1}$	–	130	200	μA	$I_Q = 1 \text{ mA}$