

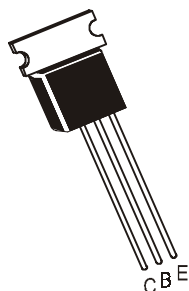
NPN SILICON PLANAR EPITAXIAL TRANSISTORS

CTN368

CTN369

TO-237

Plastic Package



Complementary CTN 369

Amplifier Transistors.

ABSOLUTE MAXIMUM RATINGS(Ta=25° C unless specified otherwise)

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Emitter Voltage	V_{CES}	25	V
Collector -Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current Continuous	I_C	1	A
Total Power Dissipation @T _A =25°C	P_D	1.0	W
Derate Above =25°C		6.4	mW/°C
Total Power Dissipation @T _C =25°C	P_D	2.75	W
Derate Above =25°C		22	mW/°C
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-55 to +150	°C

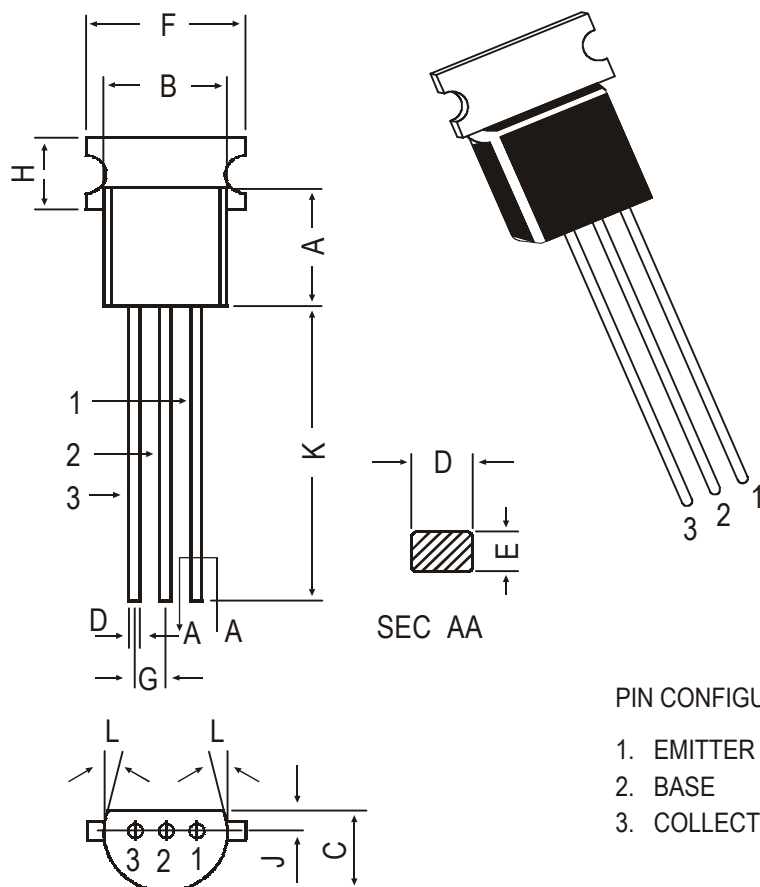
THERMAL RESISTANCE

Junction to Case	$R_{th(j-c)}$	45	°C/W
Junction to Ambient	$R_{th(j-a)}$	156	°C/W

ELECTRICAL CHARACTERISTICS (Ta=25° C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA, I_B=0$	20		V
Collector Base Breakdown Voltage	V_{CBO}	$I_C=100\mu A, I_E=0$	25		V
Emitter Base Breakdown Voltage	V_{EBO}	$I_E=100\mu A, I_C=0$	5		V
Collector Cut off Current	I_{CBO}	$V_{CB}=25V, I_E=0$ $I_E=0, V_{CB}=25V,$ $T_j=150^\circ C$		10 1	μA
Emitter Cut off Current	I_{EBO}	$V_{EB}=5V, I_C=0$		10	μA
Base Emitter on Voltage	$V_{BE(on)}$	$I_C=1A, V_{CE}=1V$		1	V
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=100mA$		0.5	V
DC Current Gain	h_{FE}	$I_C=5mA, V_{CE}=10V$ $I_C=500mA, V_{CE}=1V$ $I_C=1A, V_{CE}=1V$	50 85 60	375	
DYNAMIC CHARACTERISTICS					
Transition Frequency	f_T	$V_{CE}=5V, I_C=10mA,$ $f=20MHz$	65		MHz

TO-237 Plastic Package



All dimensions in mm.

DIM	MIN.	MAX.
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.41	0.55
E	0.35	0.50
F	—	5.40
G	1.14	1.40
H	—	2.54
K	12.70	—
L	5 DEG	
J	1.14	1.53

PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-237 Bulk	1K/polybag	240 gm/1K pcs	3" x 7.5" x 7.5"	5K	17" x 15" x 13.5"	80K	26.2 kgs
TO-237 T&A	2K/ammo box	725 gm/2K pcs	12.5" x 8" x 1.8"	2K	17" x 15" x 13.5"	32K	13.8 kgs

Disclaimer

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