

RICOH

Rx5RW SERIES

NO.EA-048-0602

OUTLINE

The Rx5RW Series are CMOS-based voltage regulator ICs with high accuracy output voltage and ultra-low supply current developed. Each of these ICs consists of a driver transistor, a voltage reference unit, an error amplifier, resistors for setting output voltage and a current limit circuit.

The output voltage of these ICs is fixed with high accuracy.

Even if V_{OUT} is shorted to GND, the included current limit circuit protects the ICs from the destruction. Furthermore, Rx5RWxxA/B have a chip enable function, so that the supply current on standby can be minimized.

Since the packages for these ICs are SC-82AB (Super Mini-mold) package and SON1612-6, high density mounting of the ICs on boards is possible.

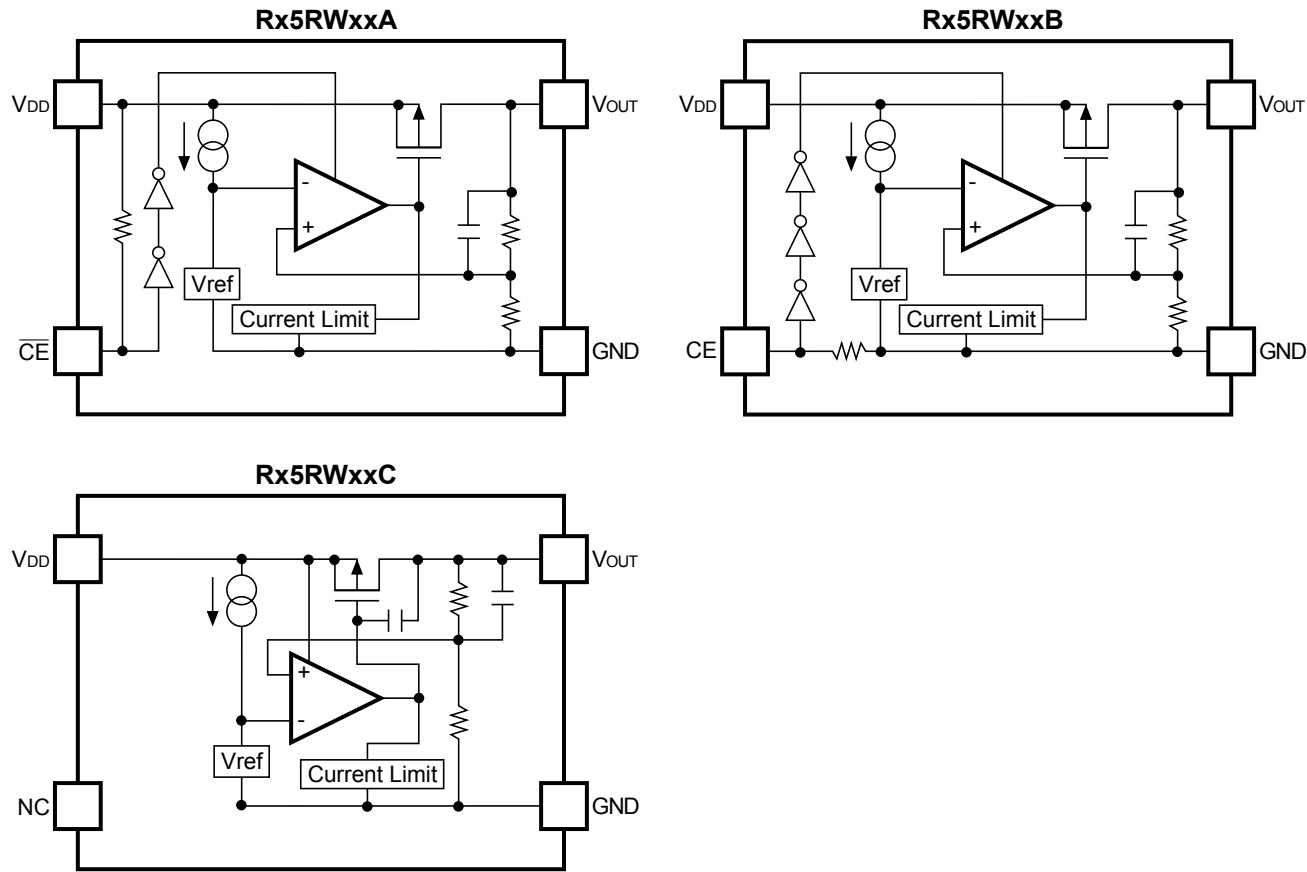
FEATURES

- Ultra-Low Supply Current..... Typ. 1.5 μ A
(except pull-up/pull-down current for $\overline{CE}$ /CE pin)
- Standby Current Typ. 0.1 μ A
- Dropout Voltage Typ. 40mV ($I_{OUT}=1$ mA, Rx5RW30A/B)
- Low Temperature-Drift Coefficient of Output Voltage... Typ. ± 100 ppm/ $^{\circ}$ C
- Excellent Line Regulation Typ. 0.05%/V
- High Accuracy Output Voltage $\pm 2.0\%$
- Ultra-Small Packages SC-82AB (Super Mini-mold), SON1612-6
- Built-in Current Limit Circuits

APPLICATIONS

- Power source for battery-powered equipment.
- Power source for cameras, VCRs, camcorders, hand-held audio instruments and hand-held communication equipment.
- Precision voltage references.

BLOCK DIAGRAMS



SELECTION GUIDE

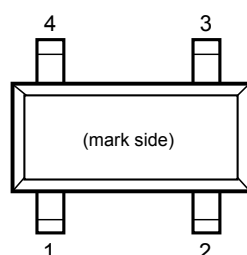
The output voltage, the active type, and the packing type for the ICs can be selected at the user's request. The selection can be made with designating the part number as shown below:

Rx5RWxxxx-xx ←Part Number
↑ ↑ ↑ ↑ ↑ ↑
a b c d e

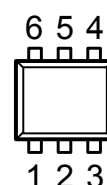
Code	Contents
a	Designation of Package Type Q: SC-82AB D:SON1612-6
b	Setting Output Voltage (V _{OUT}): Stepwise setting with a step of 0.1V in the range of 1.5V to 6.0V is possible.
c	Designation of Chip enable Active Type: A: "L" active type B: "H" active type C: no chip enable type
d	Designation of Packing Type: A: Taping B: Antistatic bag (for Sample only)
e	Designation of Taping Type: TR (refer to Taping Specifications)

PIN CONFIGURATION

● SC-82AB



● SON1612-6



PIN DESCRIPTION

● SC-82AB

Pin No	Symbol	Pin Description
1	GND	Ground Pin
2	V _{DD}	Input Pin
3	V _{OUT}	Output Pin
4	$\overline{\text{CE}}$ or CE or NC	Chip Enable Pin or No Connection

SON1612-6

Pin No	Symbol	Pin Description
1	$\overline{\text{CE}}$ or CE or NC	Chip Enable Pin or No Connection
2	V _{DD}	Input Pin
3	V _{OUT}	Output Pin
4	NC	No Connection
5	V _{DD}	Input Pin
6	GND	Ground Pin

ABSOLUTE MAXIMUM RATINGS

Symbol	Item	Rating	Unit
V _{IN}	Input Voltage	9.0	V
V _{CE}	Input Voltage for $\overline{\text{CE}}$ /CE Pin	-0.3 to V _{IN} +0.3	V
V _{OUT}	Output Voltage	-0.3 to V _{IN} +0.3	V
I _{OUT}	Output Current	150	mA
P _D	Power Dissipation (SC-82AB) *1	380	mW
	Power Dissipation (SON1612-6) *1	500	
T _{opt}	Operating Temperature	-40 to +85	°C
T _{stg}	Storage Temperature	-55 to +125	°C

*1) For Power Dissipation, please refer to PACKAGE INFORMATION to be described.

ABSOLUTE MAXIMUM RATINGS

Absolute Maximum ratings are threshold limit values that must not be exceeded even for an instant under any conditions. Moreover, such values for any two items must not be reached simultaneously. Operation above these absolute maximum ratings may cause degradation or permanent damage to the device. These are stress ratings only and do not necessarily imply functional operation below these limits.

ELECTRICAL CHARACTERISTICS

• Rx5RW30A

T_{opt}=25°C

Symbol	Item	Conditions	Min.	Typ.	Max.	Unit
V _{OUT}	Output Voltage	V _{IN} =5.0V 10μA ≤ I _{OUT} ≤ 10mA	2.940	3.000	3.060	V
I _{OUT}	Output Current	V _{IN} =5.0V	50			mA
ΔV _{OUT} /ΔI _{OUT}	Load Regulation	V _{IN} =5.0V, 1mA ≤ I _{OUT} ≤ 50mA		40	60	mV
V _{DIF}	Dropout Voltage	I _{OUT} =1mA		40	60	mV
I _{SS}	Supply Current	V _{IN} =5.0V		1.5	3.0	μA
I _{standby}	Standby Current	V _{IN} =5.0V, V _{CE} =5.0V		0.1	1.0	μA
ΔV _{OUT} /ΔV _{IN}	Line Regulation	I _{OUT} =1mA V _{OUT} +0.5V ≤ V _{IN} ≤ 8V	0.00	0.05	0.20	%/V
V _{IN}	Input Voltage				8.0	V
ΔV _{OUT} /ΔT _{opt}	Output Voltage Temperature Coefficient	I _{OUT} =10mA -40°C ≤ T _{opt} ≤ 85°C		±100		ppm/ °C
I _{LIM}	Short Current Limit	V _{OUT} =0V		40		mA
R _{PU}	Pull up resistance for CE pin		1.5	4.0	12.0	MΩ
V _{CEH}	$\overline{\text{CE}}$ Input Voltage "H"		1.5			V
V _{CEL}	$\overline{\text{CE}}$ Input Voltage "L"		0.25			V

● Rx5RW30B

T_{opt}=25°C

Symbol	Item	Conditions	Min.	Typ.	Max.	Unit
V _{OUT}	Output Voltage	V _{IN} =5.0V 10μA ≤ I _{OUT} ≤ 10mA	2.940	3.000	3.060	V
I _{OUT}	Output Current	V _{IN} =5.0V	50			mA
ΔV _{OUT} /ΔI _{OUT}	Load Regulation	V _{IN} =5.0V 1mA ≤ I _{OUT} ≤ 50mA		40	60	mV
V _{DIF}	Dropout Voltage	I _{OUT} =1mA		40	60	mV
I _{SS}	Supply Current	V _{IN} =5.0V		1.5	3.0	μA
I _{standby}	Standby Current	V _{IN} =5.0V, V _{CE} =GND		0.1	1.0	μA
ΔV _{OUT} /ΔV _{IN}	Line Regulation	I _{OUT} =1mA V _{OUT} +0.5V ≤ V _{IN} ≤ 8V	0.00	0.05	0.20	%/V
V _{IN}	Input Voltage				8.0	V
ΔV _{OUT} /ΔT _{opt}	Output Voltage Temperature Coefficient	I _{OUT} =1mA -40°C ≤ T _{opt} ≤ 85°C		±100		ppm/°C
I _{LIM}	Short Current Limit	V _{OUT} =0V		40		mA
R _{PD}	Pull down resistance for CE pin		1.5	4.0	12.0	MΩ
V _{CEH}	CE Input Voltage "H"		1.5			V
V _{CEL}	CE Input Voltage "L"		0.25			V

● Rx5RW30C

T_{opt}=25°C

Symbol	Item	Conditions	Min.	Tyo.	Max.	Unit
V _{OUT}	Output Voltage	V _{IN} =5.0V 10μA ≤ I _{OUT} ≤ 10mA	2.940	3.000	3.060	V
I _{OUT}	Output Current	V _{IN} =5.0V	50			mA
ΔV _{OUT} /ΔI _{OUT}	Load Regulation	V _{IN} =5.0V 1mA ≤ I _{OUT} ≤ 50mA		40	60	mV
V _{DIF}	Dropout Voltage	I _{OUT} =1mA		40	60	mV
I _{SS}	Supply Current	V _{IN} =5.0V		1.5	3.0	μA
ΔV _{OUT} /ΔV _{IN}	Line Regulation	I _{OUT} =1mA 3.5V ≤ V _{IN} ≤ 8.0V	0.00	0.05	0.20	%/V
V _{IN}	Input Voltage				8.0	V
ΔV _{OUT} /ΔT _{opt}	Output Voltage Temperature Coefficient	I _{OUT} =10mA -40°C ≤ T _{opt} ≤ 85°C		±100		ppm/°C
I _{LIM}	Short Current Limit			40		mA

ELECTRICAL CHARACTERISTICS BY OUTPUT VOLTAGE

Topt=25°C

Part Number	Output Voltage				Output Current			Load Regulation			Dropout Voltage		
	V _{OUT} (V)				I _{OUT} (mA)			ΔV _{OUT} /ΔI _{OUT} (mV)			V _{DIF} (mV)		
	Condi- tions	Min.	Typ.	Max.	Condi- tions	Min.	Typ.	Condi- tions	Typ.	Max.	Condi- tions	Typ.	Max.
Rx5RW15	V _{IN} -V _{OUT} =2.0V 10μA ≤ I _{OUT} ≤ 10mA	1.470	1.500	1.530	V _{IN} -V _{OUT} =2.0V	35		V _{IN} -V _{OUT} =2.0V 1mA ≤ I _{OUT} ≤ 35mA	30	45	I _{OUT} = 1mA	120	200
Rx5RW16		1.568	1.600	1.632								90	135
Rx5RW17		1.666	1.700	1.734									
Rx5RW18		1.764	1.800	1.836									
Rx5RW19		1.862	1.900	1.938									
Rx5RW20		1.960	2.000	2.040								60	90
Rx5RW21		2.058	2.100	2.142									
Rx5RW22		2.156	2.200	2.244									
Rx5RW23		2.254	2.300	2.346									
Rx5RW24		2.352	2.400	2.448								50	75
Rx5RW25		2.450	2.500	2.550									
Rx5RW26		2.548	2.600	2.652									
Rx5RW27		2.646	2.700	2.754									
Rx5RW28		2.744	2.800	2.856								40	60
Rx5RW29		2.842	2.900	2.958									
Rx5RW30		2.940	3.000	3.060									
Rx5RW31		3.038	3.100	3.162									
Rx5RW32		3.136	3.200	3.264		35	55						
Rx5RW33		3.234	3.300	3.366									
Rx5RW34		3.332	3.400	3.468									
Rx5RW35		3.430	3.500	3.570									
Rx5RW36		3.528	3.600	3.672		30	45						
Rx5RW37		3.626	3.700	3.774									
Rx5RW38		3.724	3.800	3.876									
Rx5RW39		3.822	3.900	3.978									
Rx5RW40		3.920	4.000	4.080		65		V _{IN} -V _{OUT} =2.0V 1mA ≤ I _{OUT} ≤ 65mA	50	70		25	40
Rx5RW41		4.018	4.100	4.182									
Rx5RW42		4.116	4.200	4.284									
Rx5RW43		4.214	4.300	4.386									
Rx5RW44		4.312	4.400	4.488									
Rx5RW45	4.410	4.500	4.590										
Rx5RW46	4.508	4.600	4.692										
Rx5RW47	4.606	4.700	4.794										
Rx5RW48	4.704	4.800	4.896										
Rx5RW49	4.802	4.900	4.998										
Rx5RW50	4.900	5.000	5.100	80		V _{IN} -V _{OUT} =2.0V 1mA ≤ I _{OUT} ≤ 80mA	60	90					
Rx5RW51	4.998	5.100	5.202										
Rx5RW52	5.096	5.200	5.304										
Rx5RW53	5.194	5.300	5.406										
Rx5RW54	5.292	5.400	5.508										
Rx5RW55	5.390	5.500	5.610										
Rx5RW56	5.488	5.600	5.712										
Rx5RW57	5.586	5.700	5.814										
Rx5RW58	5.684	5.800	5.916										
Rx5RW59	5.782	5.900	6.018										
Rx5RW60	5.880	6.000	6.120										

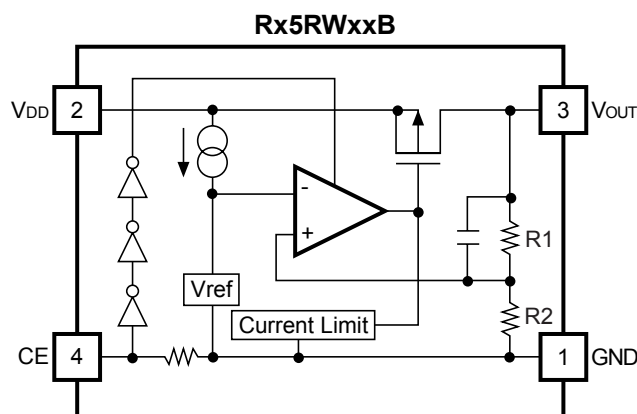
ELECTRICAL CHARACTERISTICS BY OUTPUT VOLTAGE

(common characteristics)

T_{opt}=25°C

Symbol	Item	Conditions	Min.	Typ.	Max.	Unit
I _{SS}	Supply Current	V _{IN} =setV _{OUT} +2.0		1.5	3.0	μA
I _{standby}	Standby Current	V _{IN} =setV _{OUT} +2.0V V _{CE} =V _{IN} (Rx5RWxxA), V _{CE} =GND (Rx5RWxxB)		0.1	1.0	μA
ΔV _{OUT} /ΔV _{IN}	Line Regulation	I _{OUT} =1mA setV _{OUT} +0.5V ≤ V _{IN} ≤ 8V	0.00	0.05	0.20	%/V
V _{IN}	Input Voltage				8.0	V
ΔV _{OUT} /ΔT _{opt}	Output Voltage Temperature Coefficient	I _{OUT} =10mA −40°C ≤ T _{opt} ≤ 85°C		±100		ppm/°C
I _{LIM}	Short Current Limit	V _{OUT} =0V		40		mA
R _{PU} /R _{PD}	$\overline{\text{CE}}$ Pull-up / CE Pull-down Resistance	applied to A/B version	1.5	4.0	12.0	MΩ
V _{CEH}	$\overline{\text{CE}}$ /CE Input Voltage “H”	applied to A/B version	1.5			V
V _{CEL}	$\overline{\text{CE}}$ /CE Input Voltage “L”	applied to A/B version			0.25	V

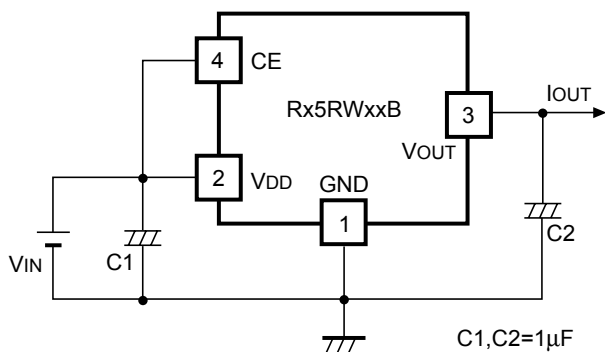
OPERATION



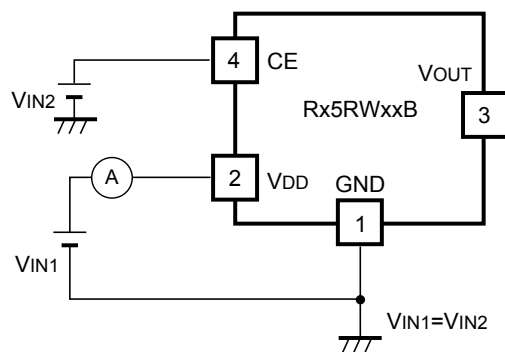
In these ICs, output voltage V_{OUT} is detected by Feedback Registers R1, R2, and the detected output voltage is compared with a reference voltage by the error amplifier, so that a constant voltage is output.

A current limit circuit working for short protect, and a chip enable circuit are included.

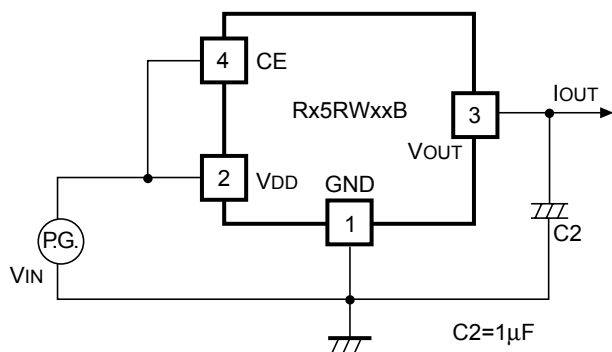
TEST CIRCUITS



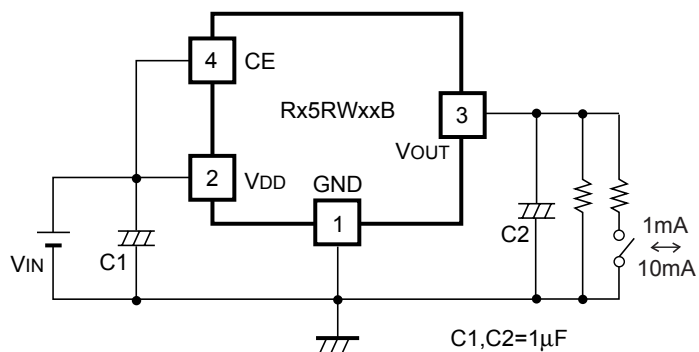
Standard Test Circuit



Test Circuit for Supply Current

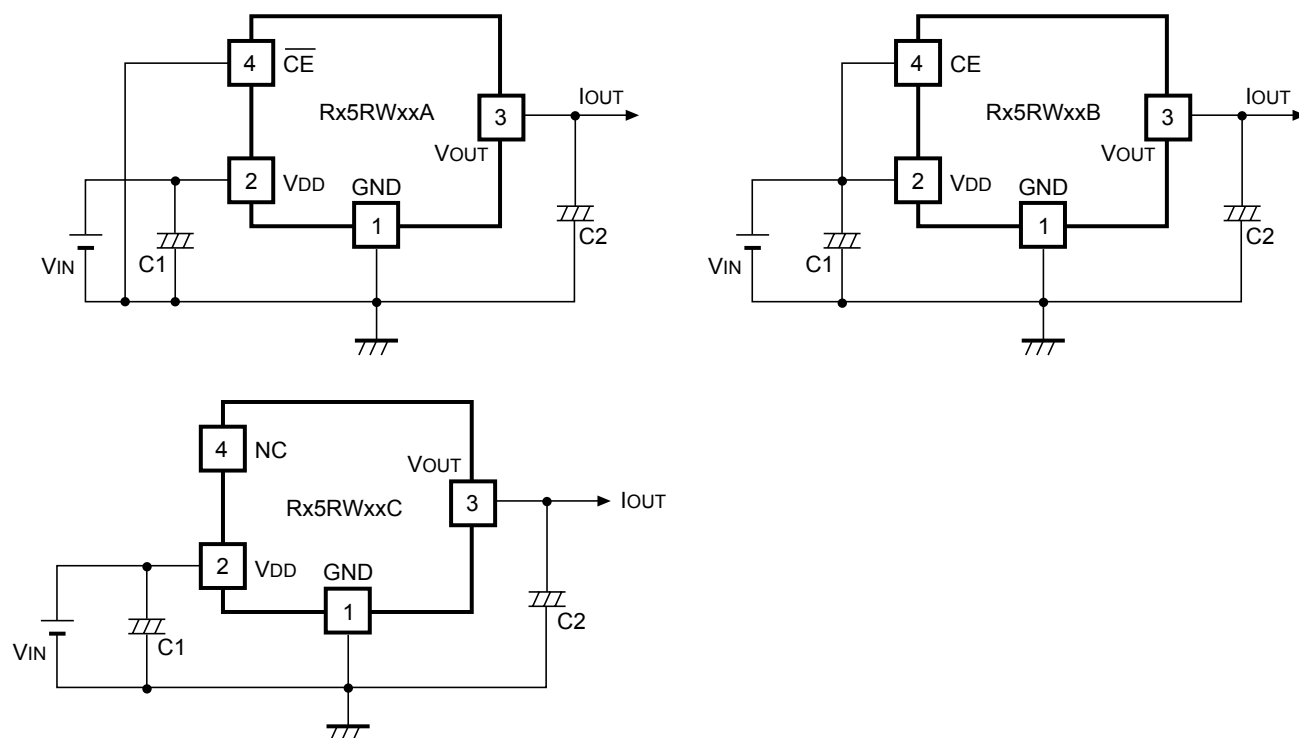


Test Circuit for Ripple Rejection and Line Transient Response



Test Circuit for Load Transient Response

TYPICAL APPLICATION

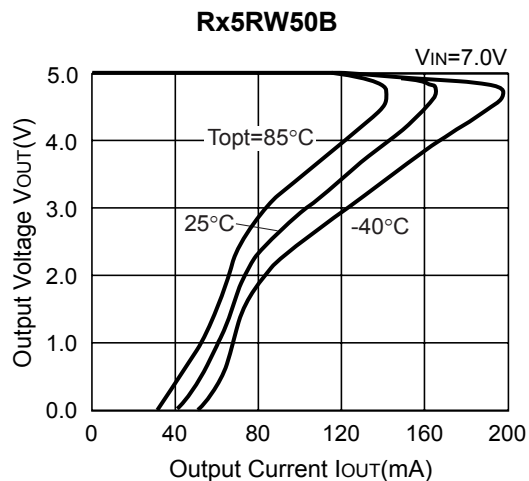
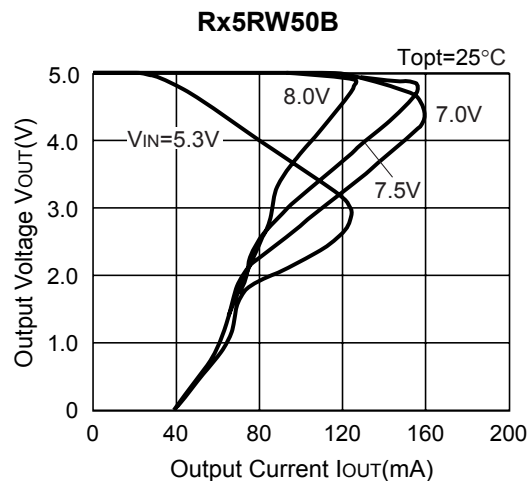
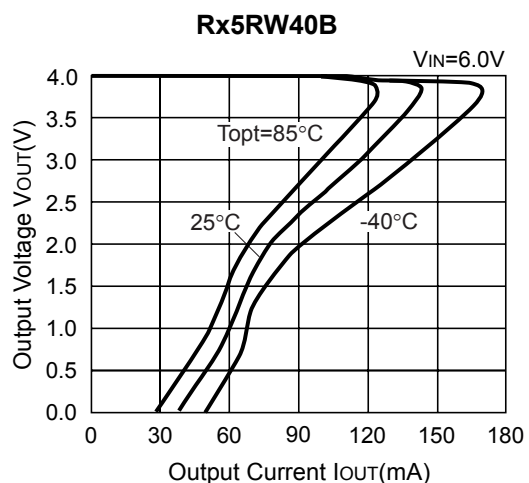
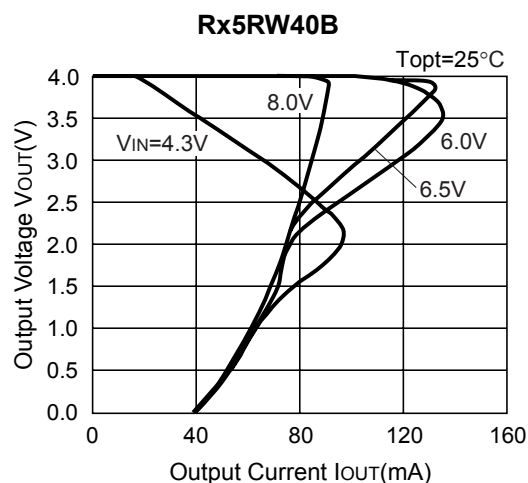
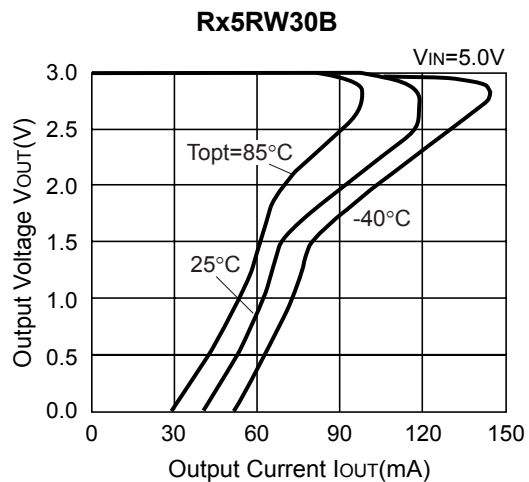
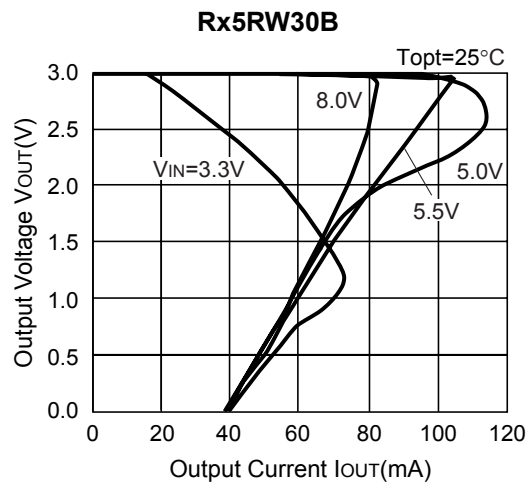


In Rx5RW Series, a constant voltage can be obtained without using capacitors, C1 and C2. However, when the wire connected V_{IN} is long, use capacitor C1. Output noise can be reduced with using capacitor 2.

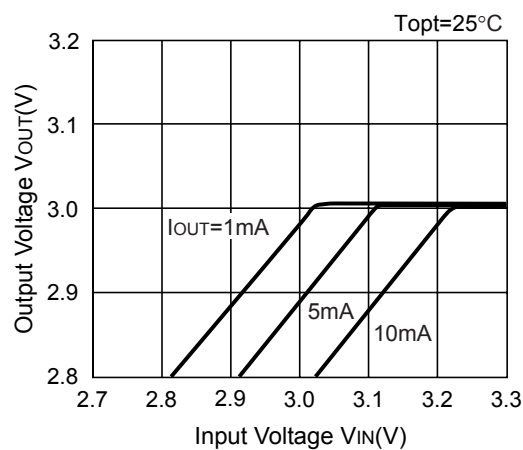
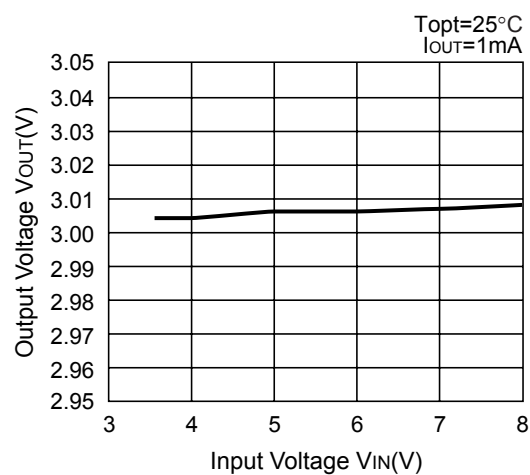
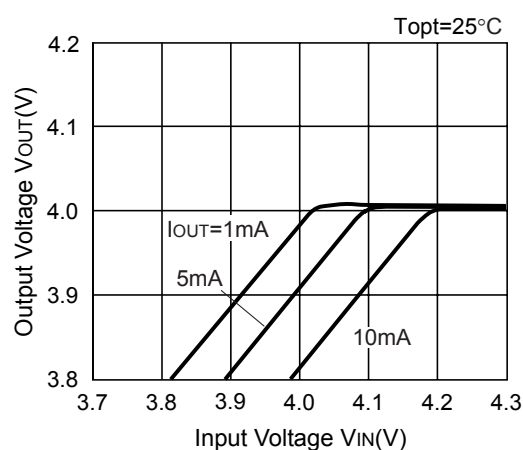
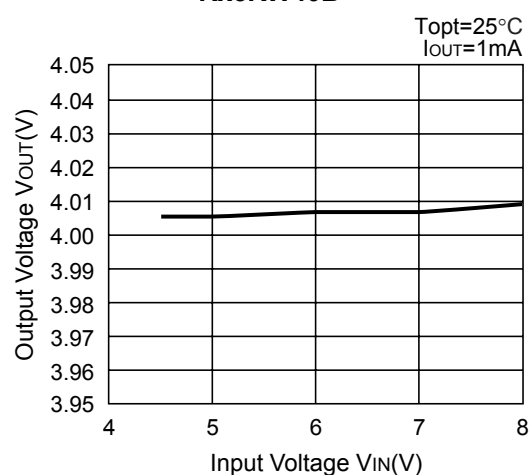
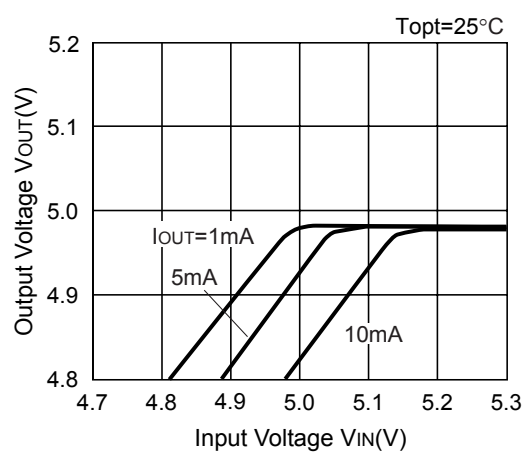
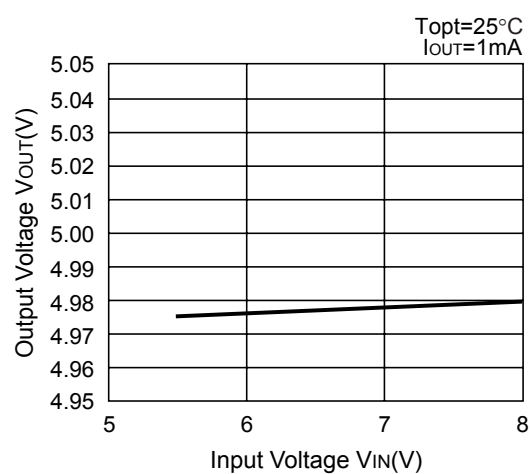
Insert capacitors C1 and C2 with the capacitance of $0.1\mu\text{F}$ to $2\mu\text{F}$ between input/output pins and GND pin with minimum wiring.

TYPICAL CHARACTERISTICS

1) Output Voltage vs. Output Current

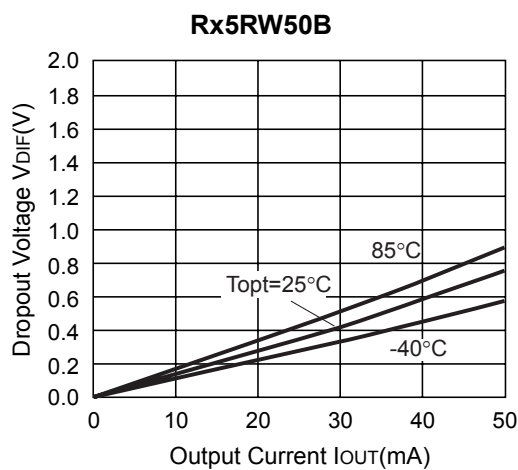
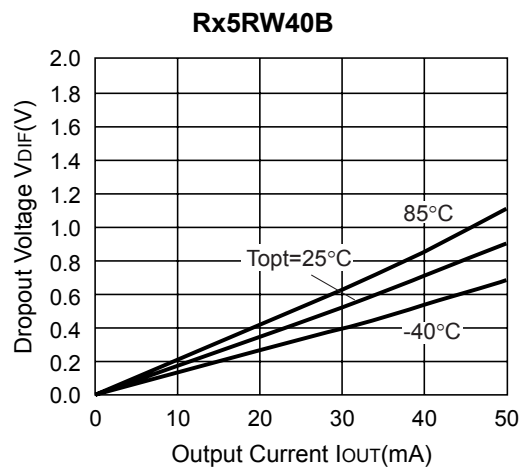
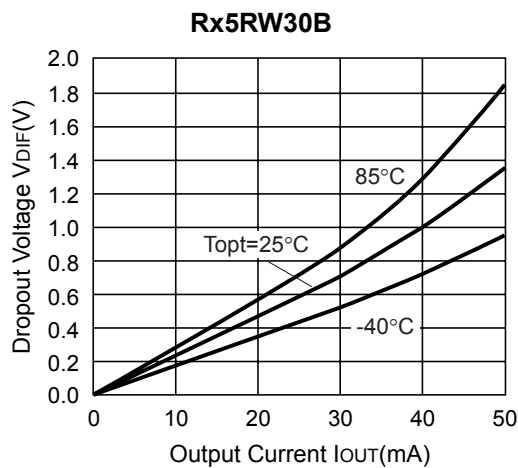


2) Output Voltage vs. Input Voltage

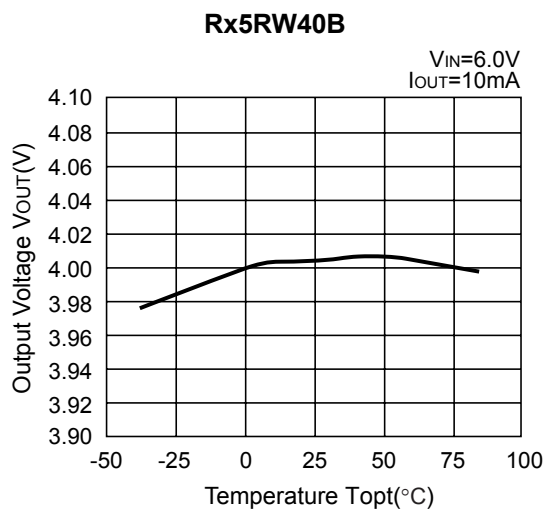
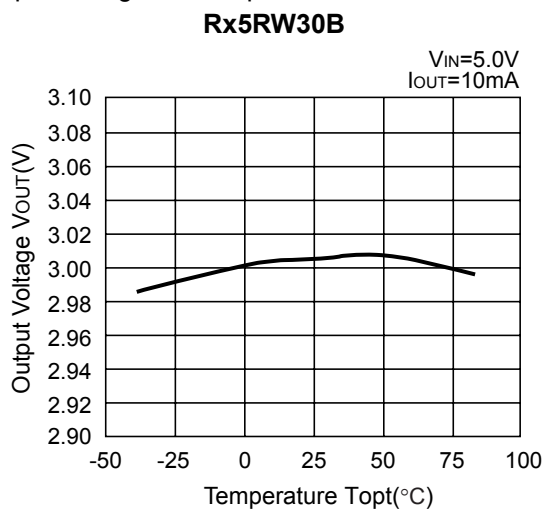
Rx5RW30B**Rx5RW30B****Rx5RW40B****Rx5RW40B****Rx5RW50B****Rx5RW50B**

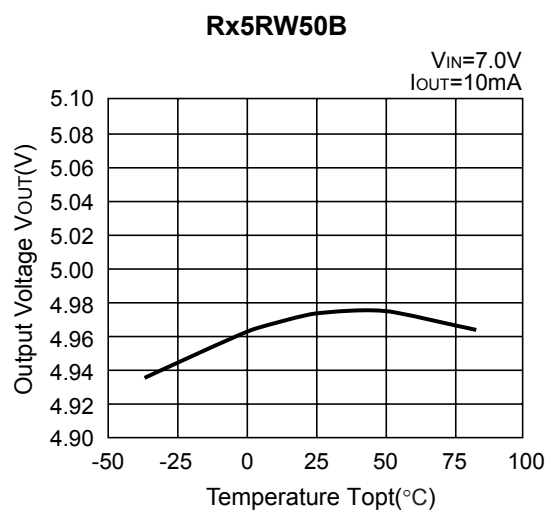
Rx5RW

3) Dropout Voltage vs. Output Current

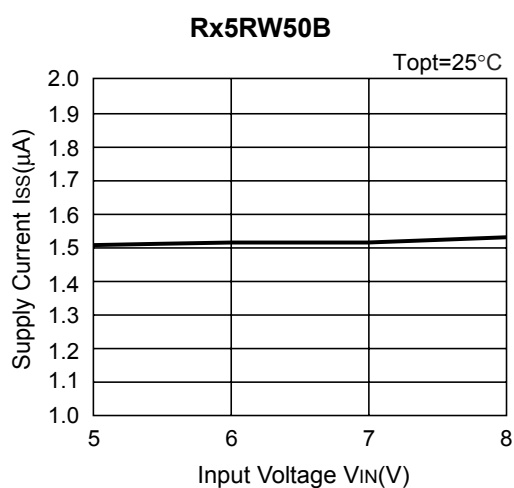
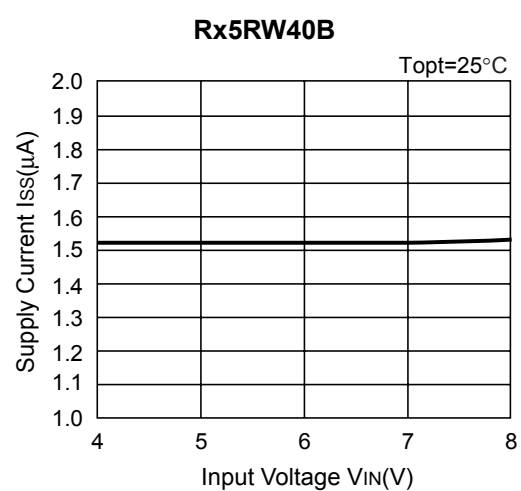
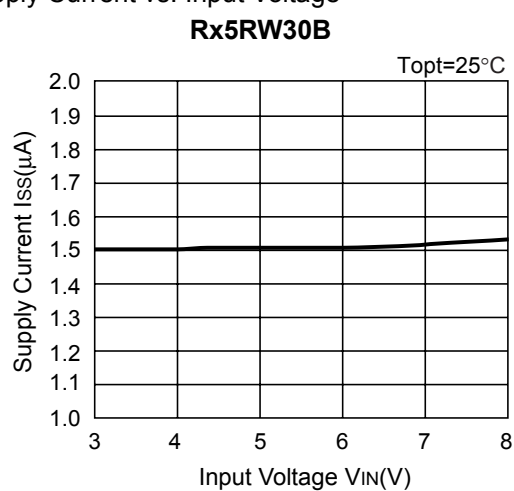


4) Output Voltage vs. Temperature



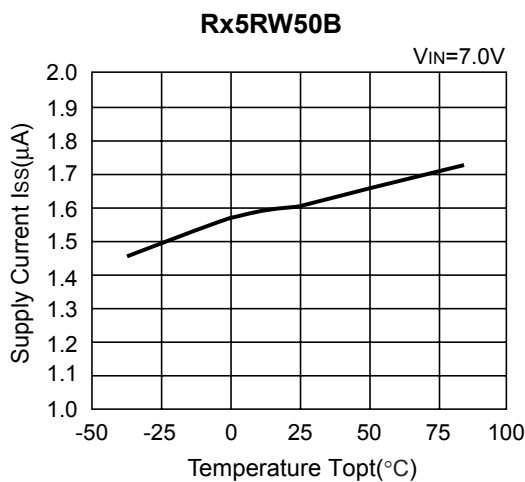
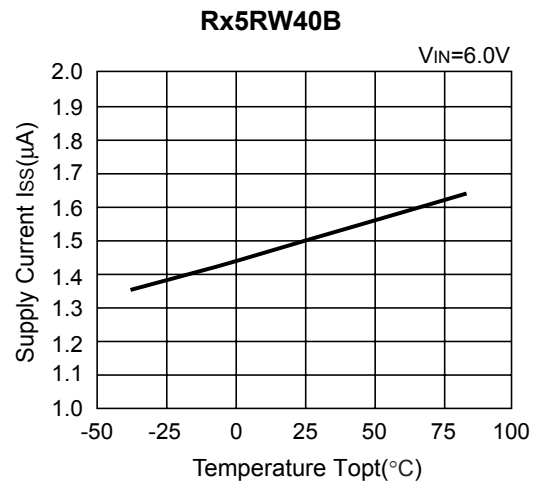
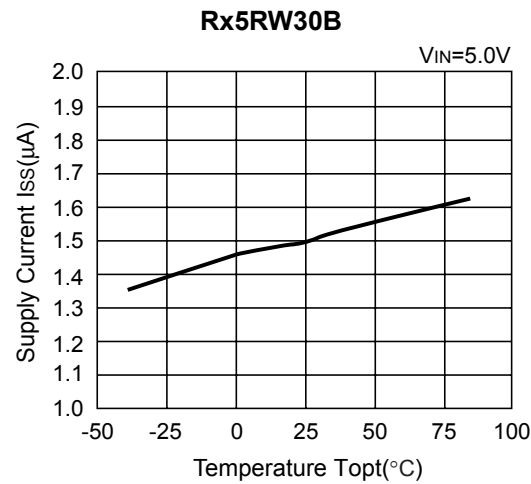


5) Supply Current vs. Input Voltage

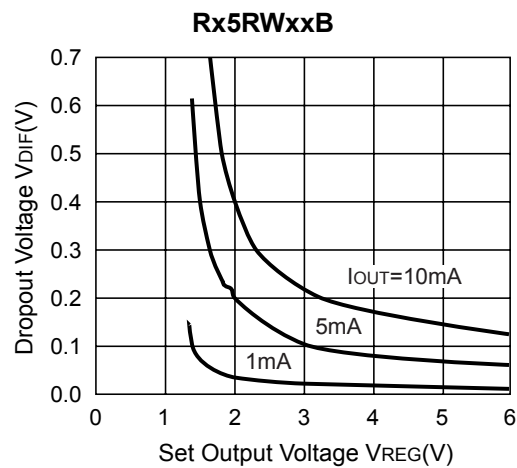


Rx5RW

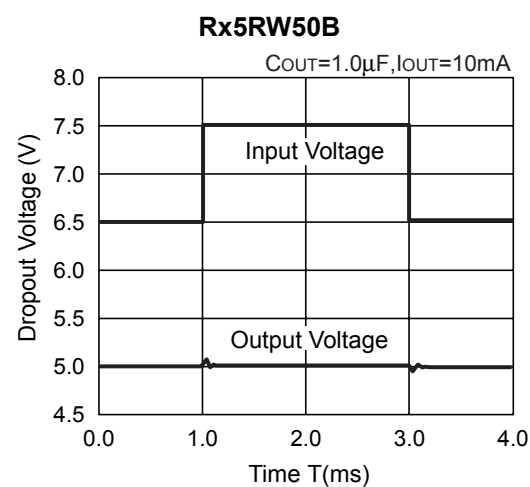
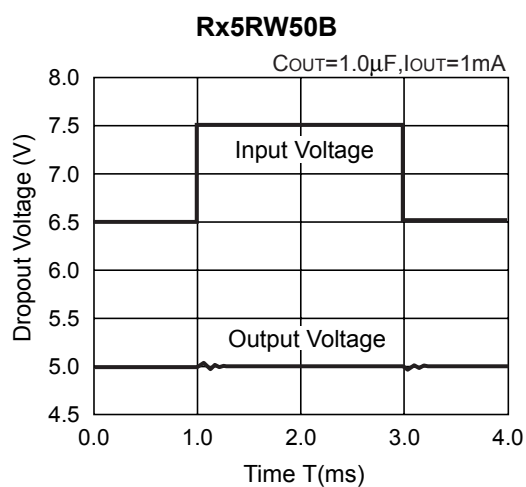
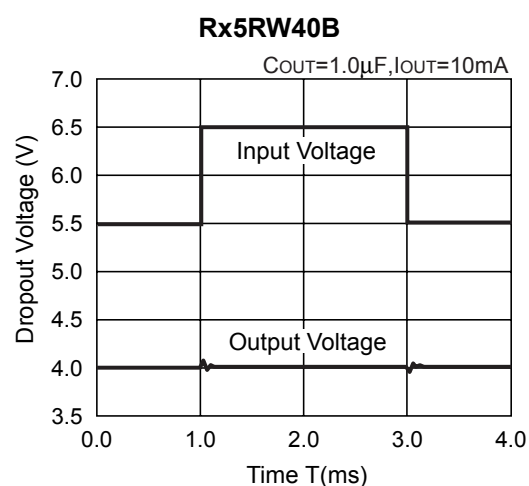
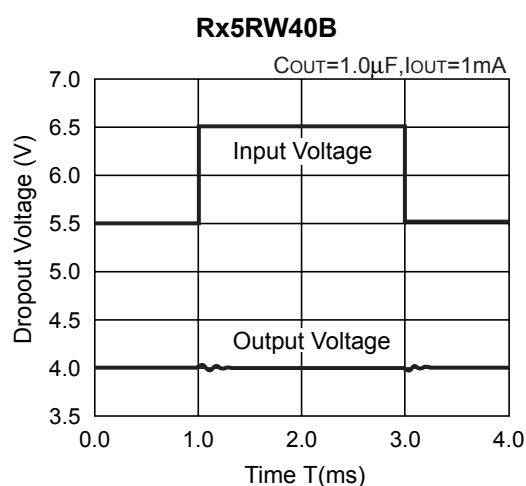
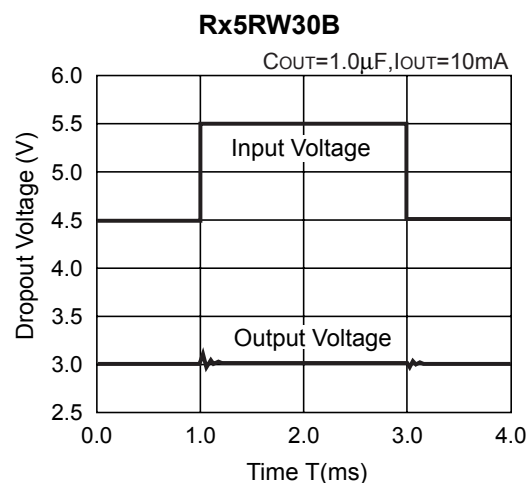
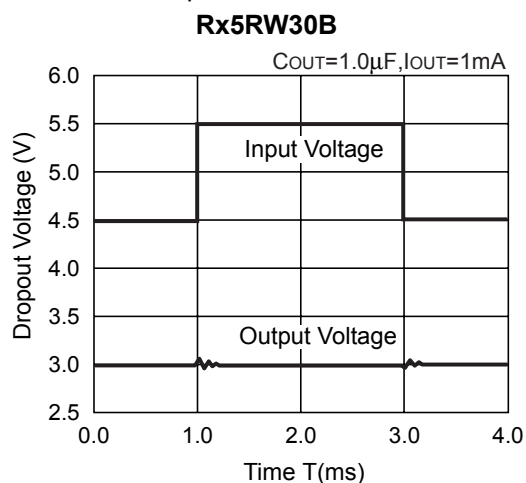
6) Supply Current vs. Temperature



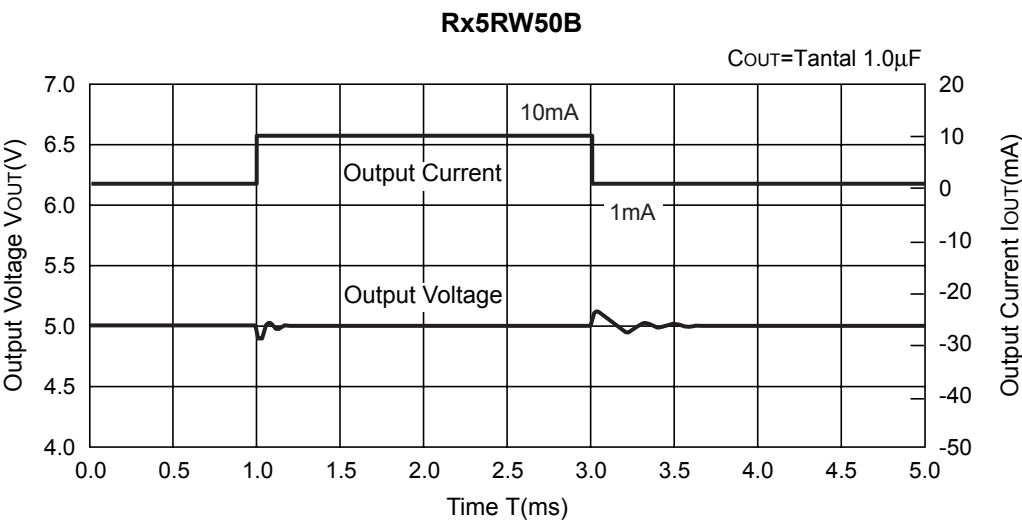
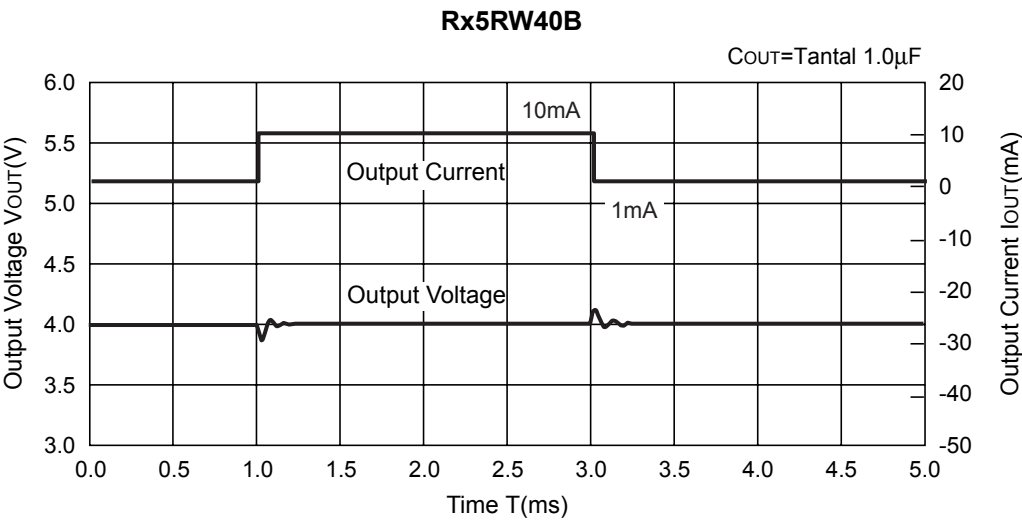
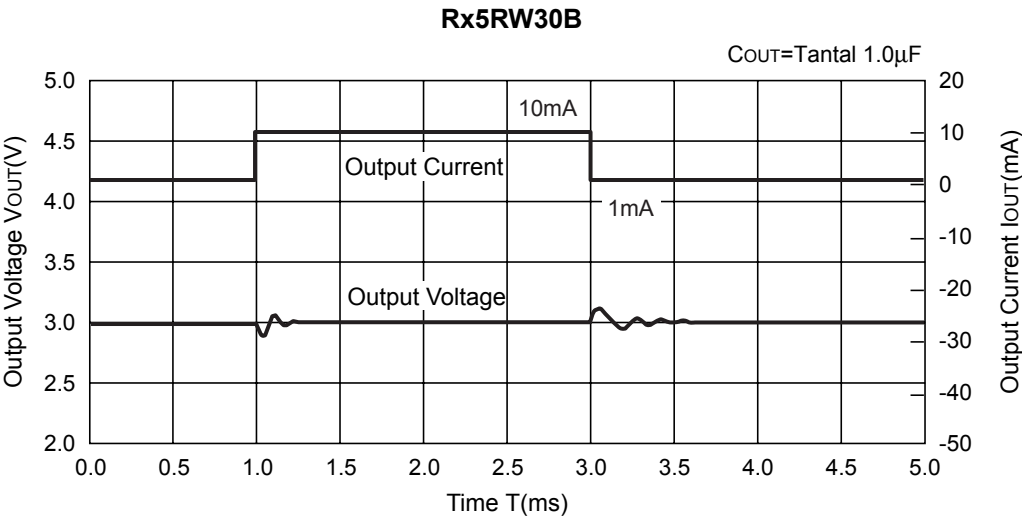
7) Dropout Voltage vs. Set Output Voltage



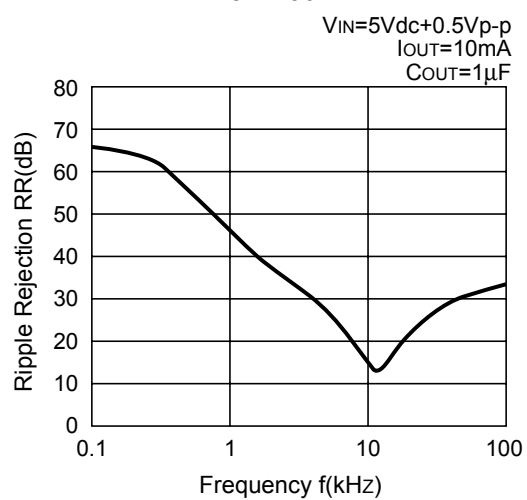
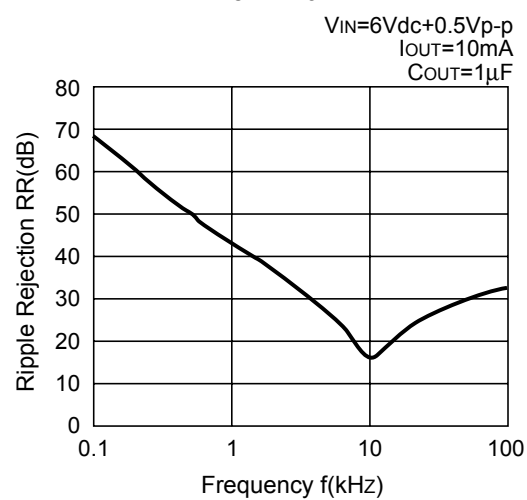
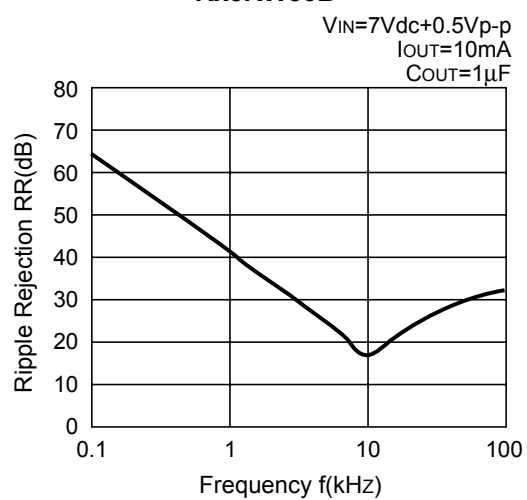
8) Line Transient Response



9) Load Transient Response



10) Ripple Rejection

Rx5RW30B**Rx5RW40B****Rx5RW50B**

Unit: mm

Technical drawing of a mechanical part, showing three views: front, side, and top. The drawing includes dimensions for various features.

Front View Dimensions:

- Total width: 2 ± 0.2
- Distance between inner mounting tabs: 1.3 ± 0.2
- Distance from outer edge to inner tab: 0.3 ± 0.1
- Height of the main body: $1.25^{+0.2}_{-0.1}$
- Total height: 2.1 ± 0.3
- Width of the base: 0.4 ± 0.1
- Distance from centerline to the base edge: 0.05

Side View Dimensions:

- Top flange width: 0.9 ± 0.1
- Distance from centerline to the top flange edge: (0.7)
- Height of the top flange: 0.3 ± 0.2
- Distance from centerline to the base edge: $0 \text{ to } 0.1$
- Base width: $0.16^{+0.1}_{-0.06}$

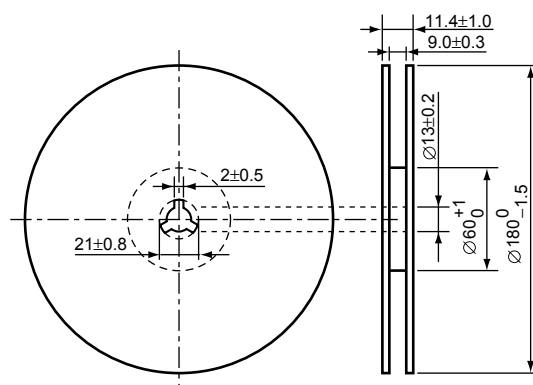
Top View Dimensions:

- Distance from centerline to the side edge: 0.3 ± 0.1
- Distance from centerline to the base edge: 0.4 ± 0.1
- Distance from centerline to the base edge: 0.05

Technical drawing of a mechanical part with dimensions and tolerances:

- Overall length: 1.6 MAX.
- Top left dimension: 0.2 ± 0.1
- Top center dimension: 4.0 ± 0.1
- Top right dimension: 2.0 ± 0.05
- Top hole diameter: $\varnothing 1.5 \begin{smallmatrix} +0.1 \\ 0 \end{smallmatrix}$
- Right side dimension: 1.75 ± 0.1
- Right side dimension: 3.5 ± 0.05
- Right side dimension: 8.0 ± 0.3
- Bottom right dimension: 2.2
- Bottom right dimension: 2.6
- Bottom right dimension: 4.0 ± 0.1
- Bottom right dimension: $\varnothing 1.1 \pm 0.1$
- Bottom center dimension: TR
- Bottom center dimension: $\text{User Direction of Feed}$

(1reel=3000pcs)



POWER DISSIPATION (SC-82AB)

This specification is at mounted on board. Power Dissipation (P_D) depends on conditions of mounting on board. This specification is based on the measurement at the condition below:

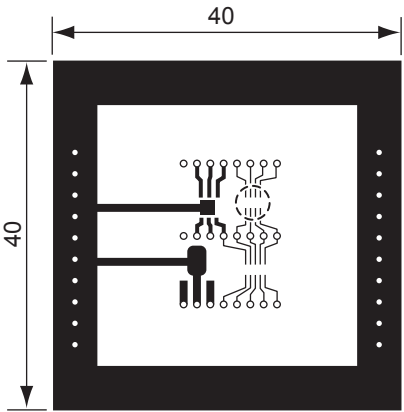
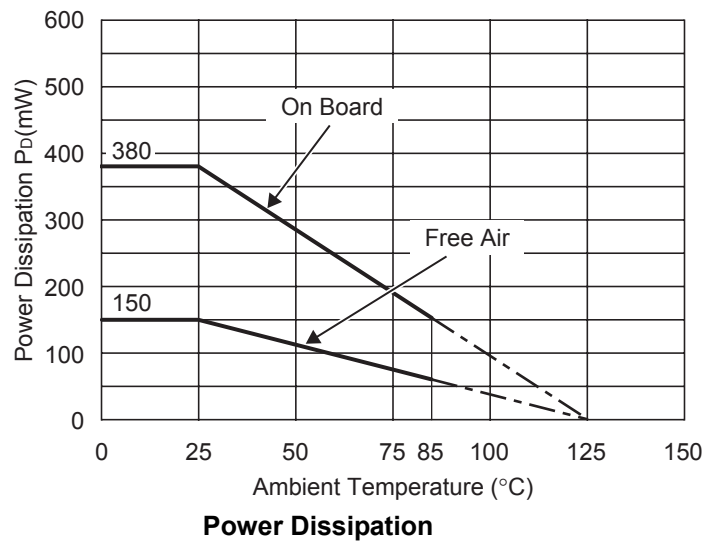
Measurement Conditions

	Standard Land Pattern
Environment	Mounting on Board (Wind velocity=0m/s)
Board Material	Glass cloth epoxy plastic (Double sided)
Board Dimensions	40mm × 40mm × 1.6mm
Copper Ratio	Top side : Approx. 50% , Back side : Approx. 50%
Through-hole	φ0.5mm × 44pcs

Measurement Result

(T_{opt}=25°C, T_{jmax}=125°C)

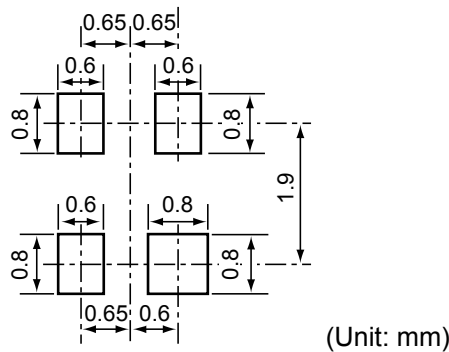
	Standard Land Pattern	Free Air
Power Dissipation	380mW	150mW
Thermal Resistance	$\theta_{ja}=(125-25^{\circ}\text{C})/0.38\text{W}=263^{\circ}\text{C/W}$	667°C/W



Measurement Board Pattern

○ IC Mount Area (Unit : mm)

RECOMMENDED LAND PATTERN

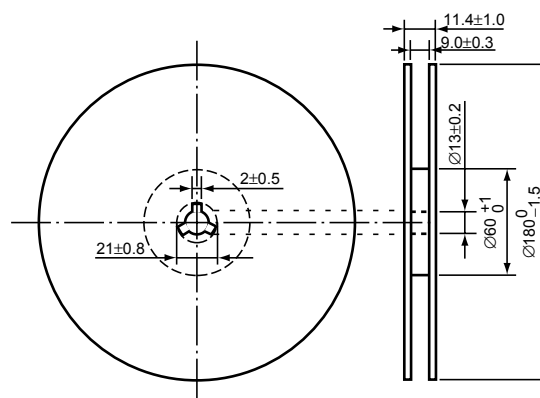


Unit: mm

Technical drawing of a rectangular plate with dimensions and features:

- Overall width: 8.0 ± 0.3
- Overall height: 1.75 ± 0.1
- Top edge features:
 - Left corner: 0.25 ± 0.1
 - Top edge: 1.5 ± 0.1
 - Top edge: 4.0 ± 0.1
 - Top edge: 2.0 ± 0.05
- Bottom edge features:
 - Bottom edge: 1.1 MAX.
 - Bottom edge: 4.0 ± 0.1
- Internal features:
 - Four circular holes along the top edge.
 - Two rectangular features along the bottom edge.
 - One circular hole in the bottom right corner.
- Dimensions for internal features:
 - Distance between top holes: 1.75
 - Distance between bottom features: 1.75
 - Distance from bottom feature to bottom corner hole: 1.1 ± 0.1
- Direction of feed: Indicated by an arrow pointing right, labeled "User Direction of Feed".
- Label: "TR" is present below the drawing.

(1reel=4000pcs)



Power Dissipation (SON1612-6)

This specification is at mounted on board.
Power Dissipation (P_D) depends on conditions of mounting on board. This specification is based on the measurement at the condition below:

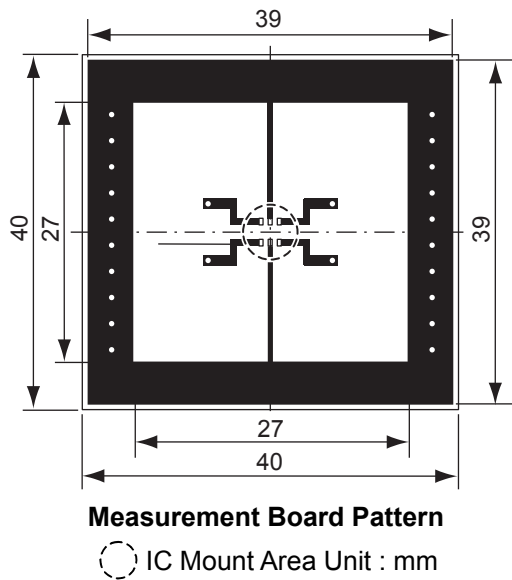
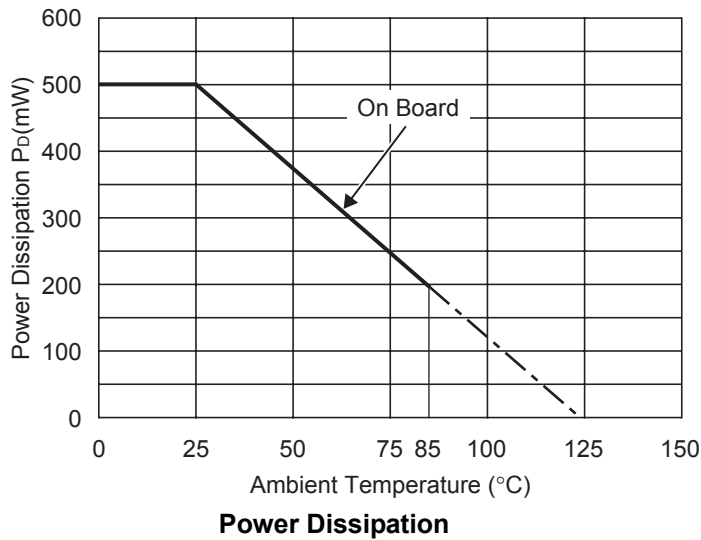
Measurement Conditions

	Standard Land Pattern
Environment	Mounting on Board (Wind velocity=0m/s)
Board Material	Glass cloth epoxy plactic (Double sided)
Board Dimensions	40mm × 40mm × 1.6mm
Copper Ratio	Top side : Approx. 50%, Back side : Approx.50%
Through-hole	φ0.5mm × 24pcs

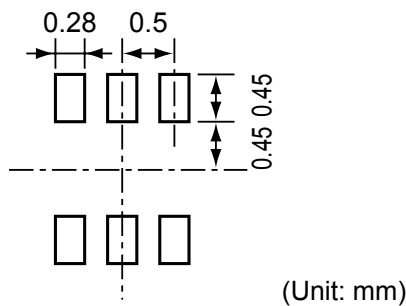
Measurement Result

(T_{opt} =25°C, T_{jmax} =125°C)

	Standard Land Pattern
Power Dissipation	500mW
Thermal Resistance	$\theta_{ja}=(125-25^{\circ}\text{C})/0.5\text{W}=200^{\circ}\text{C/W}$

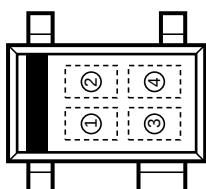


RECOMMENDED LAND PATTERN



RQ5RW SERIES MARK SPECIFICATION

• SC-82AB



①, ② : Product Code (refer to Part Number vs. Product Code)

③, ④ : Lot Number

• Part Number vs. Product Code

Part Number	Product Code	
	①	②
RQ5RW20AA	2	A
RQ5RW21AA	2	B
RQ5RW22AA	2	C
RQ5RW23AA	2	D
RQ5RW24AA	2	E
RQ5RW25AA	2	F
RQ5RW26AA	2	G
RQ5RW27AA	2	H
RQ5RW28AA	2	J
RQ5RW29AA	2	K
RQ5RW30AA	3	A
RQ5RW31AA	3	B
RQ5RW32AA	3	C
RQ5RW33AA	3	D
RQ5RW34AA	3	E
RQ5RW35AA	3	F
RQ5RW36AA	3	G
RQ5RW37AA	3	H
RQ5RW38AA	3	J
RQ5RW39AA	3	K
RQ5RW40AA	4	A
RQ5RW41AA	4	B
RQ5RW42AA	4	C
RQ5RW43AA	4	D
RQ5RW44AA	4	E
RQ5RW45AA	4	F
RQ5RW46AA	4	G
RQ5RW47AA	4	H
RQ5RW48AA	4	J
RQ5RW49AA	4	K
RQ5RW50AA	5	A
RQ5RW51AA	5	B
RQ5RW52AA	5	C
RQ5RW53AA	5	D

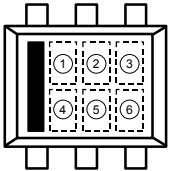
Part Number	Product Code	
	①	②
RQ5RW54AA	5	E
RQ5RW55AA	5	F
RQ5RW56AA	5	G
RQ5RW57AA	5	H
RQ5RW58AA	5	J
RQ5RW59AA	5	K
RQ5RW60AA	6	A
RQ5RW19AA	6	B
RQ5RW18AA	6	C
RQ5RW17AA	6	D
RQ5RW16AA	6	E
RQ5RW15AA	6	F
RQ5RW20BA	7	A
RQ5RW21BA	7	B
RQ5RW22BA	7	C
RQ5RW23BA	7	D
RQ5RW24BA	7	E
RQ5RW25BA	7	F
RQ5RW26BA	7	G
RQ5RW27BA	7	H
RQ5RW28BA	7	J
RQ5RW29BA	7	K
RQ5RW30BA	8	A
RQ5RW31BA	8	B
RQ5RW32BA	8	C
RQ5RW33BA	8	D
RQ5RW34BA	8	E
RQ5RW35BA	8	F
RQ5RW36BA	8	G
RQ5RW37BA	8	H
RQ5RW38BA	8	J
RQ5RW39BA	8	K
RQ5RW40BA	9	A
RQ5RW41BA	9	B

Part Number	Product Code	
	①	②
RQ5RW42BA	9	C
RQ5RW43BA	9	D
RQ5RW44BA	9	E
RQ5RW45BA	9	F
RQ5RW46BA	9	G
RQ5RW47BA	9	H
RQ5RW48BA	9	J
RQ5RW49BA	9	K
RQ5RW50BA	0	A
RQ5RW51BA	0	B
RQ5RW52BA	0	C
RQ5RW53BA	0	D
RQ5RW54BA	0	E
RQ5RW55BA	0	F
RQ5RW56BA	0	G
RQ5RW57BA	0	H
RQ5RW58BA	0	J
RQ5RW59BA	0	K
RQ5RW60BA	1	A
RQ5RW19BA	1	B
RQ5RW18BA	1	C
RQ5RW17BA	1	D
RQ5RW16BA	1	E
RQ5RW15BA	1	F
RQ5RW20CA	2	L
RQ5RW21CA	2	M
RQ5RW22CA	2	N
RQ5RW23CA	2	P
RQ5RW24CA	2	R
RQ5RW25CA	2	S
RQ5RW26CA	2	T
RQ5RW27CA	2	U
RQ5RW28CA	2	V
RQ5RW29CA	2	W

Part Number	Product Code	
	①	②
RQ5RW30CA	3	L
RQ5RW31CA	3	M
RQ5RW32CA	3	N
RQ5RW33CA	3	P
RQ5RW34CA	3	R
RQ5RW35CA	3	S
RQ5RW36CA	3	T
RQ5RW37CA	3	U
RQ5RW38CA	3	V
RQ5RW39CA	3	W
RQ5RW40CA	4	L
RQ5RW41CA	4	M
RQ5RW42CA	4	N
RQ5RW43CA	4	P
RQ5RW44CA	4	R
RQ5RW45CA	4	S
RQ5RW46CA	4	T
RQ5RW47CA	4	U
RQ5RW48CA	4	V
RQ5RW49CA	4	W
RQ5RW50CA	5	L
RQ5RW51CA	5	M
RQ5RW52CA	5	N
RQ5RW53CA	5	P
RQ5RW54CA	5	R
RQ5RW55CA	5	S
RQ5RW56CA	5	T
RQ5RW57CA	5	U
RQ5RW58CA	5	V
RQ5RW59CA	5	W
RQ5RW60CA	6	L
RQ5RW19CA	6	M
RQ5RW18CA	6	N
RQ5RW17CA	6	P
RQ5RW16CA	6	S

RD5RW SERIES MARK SPECIFICATION

• SON1612-6



①～④ : Product Code (refer to Part Number vs. Product Code)

⑤, ⑥ : Lot Number

• Part Number vs. Product Code

Part Number	Product Code			
	①	②	③	④
RD5RW15AA	E	1	5	A
RD5RW16AA	E	1	6	A
RD5RW17AA	E	1	7	A
RD5RW18AA	E	1	8	A
RD5RW19AA	E	1	9	A
RD5RW20AA	E	2	0	A
RD5RW21AA	E	2	1	A
RD5RW22AA	E	2	2	A
RD5RW23AA	E	2	3	A
RD5RW24AA	E	2	4	A
RD5RW25AA	E	2	5	A
RD5RW26AA	E	2	6	A
RD5RW27AA	E	2	7	A
RD5RW28AA	E	2	8	A
RD5RW29AA	E	2	9	A
RD5RW30AA	E	3	0	A
RD5RW31AA	E	3	1	A
RD5RW32AA	E	3	2	A
RD5RW33AA	E	3	3	A
RD5RW34AA	E	3	4	A
RD5RW35AA	E	3	5	A
RD5RW36AA	E	3	6	A
RD5RW37AA	E	3	7	A
RD5RW38AA	E	3	8	A
RD5RW39AA	E	3	9	A
RD5RW40AA	E	4	0	A
RD5RW41AA	E	4	1	A
RD5RW42AA	E	4	2	A
RD5RW43AA	E	4	3	A
RD5RW44AA	E	4	4	A
RD5RW45AA	E	4	5	A
RD5RW46AA	E	4	6	A
RD5RW47AA	E	4	7	A
RD5RW48AA	E	4	8	A
RD5RW49AA	E	4	9	A
RD5RW50AA	E	5	0	A

Part Number	Product Code			
	①	②	③	④
RD5RW51AA	E	5	1	A
RD5RW52AA	E	5	2	A
RD5RW53AA	E	5	3	A
RD5RW54AA	E	5	4	A
RD5RW55AA	E	5	5	A
RD5RW56AA	E	5	6	A
RD5RW57AA	E	5	7	A
RD5RW58AA	E	5	8	A
RD5RW59AA	E	5	9	A
RD5RW60AA	E	6	0	A
RD5RW15BA	E	1	5	B
RD5RW16BA	E	1	6	B
RD5RW17BA	E	1	7	B
RD5RW18BA	E	1	8	B
RD5RW19BA	E	1	9	B
RD5RW20BA	E	2	0	B
RD5RW21BA	E	2	1	B
RD5RW22BA	E	2	2	B
RD5RW23BA	E	2	3	B
RD5RW24BA	E	2	4	B
RD5RW25BA	E	2	5	B
RD5RW26BA	E	2	6	B
RD5RW27BA	E	2	7	B
RD5RW28BA	E	2	8	B
RD5RW29BA	E	2	9	B
RD5RW30BA	E	3	0	B
RD5RW31BA	E	3	1	B
RD5RW32BA	E	3	2	B
RD5RW33BA	E	3	3	B
RD5RW34BA	E	3	4	B
RD5RW35BA	E	3	5	B
RD5RW36BA	E	3	6	B
RD5RW37BA	E	3	7	B
RD5RW38BA	E	3	8	B
RD5RW39BA	E	3	9	B
RD5RW40BA	E	4	0	B

Part Number	Product Code			
	①	②	③	④
RD5RW41BA	E	4	1	B
RD5RW42BA	E	4	2	B
RD5RW43BA	E	4	3	B
RD5RW44BA	E	4	4	B
RD5RW45BA	E	4	5	B
RD5RW46BA	E	4	6	B
RD5RW47BA	E	4	7	B
RD5RW48BA	E	4	8	B
RD5RW49BA	E	4	9	B
RD5RW50BA	E	5	0	B
RD5RW51BA	E	5	1	B
RD5RW52BA	E	5	2	B
RD5RW53BA	E	5	3	B
RD5RW54BA	E	5	4	B
RD5RW55BA	E	5	5	B
RD5RW56BA	E	5	6	B
RD5RW57BA	E	5	7	B
RD5RW58BA	E	5	8	B
RD5RW59BA	E	5	9	B
RD5RW60BA	E	6	0	B
RD5RW15CA	E	1	5	C
RD5RW16CA	E	1	6	C
RD5RW17CA	E	1	7	C
RD5RW18CA	E	1	8	C
RD5RW19CA	E	1	9	C
RD5RW20CA	E	2	0	C
RD5RW21CA	E	2	1	C
RD5RW22CA	E	2	2	C
RD5RW23CA	E	2	3	C
RD5RW24CA	E	2	4	C
RD5RW25CA	E	2	5	C
RD5RW26CA	E	2	6	C
RD5RW27CA	E	2	7	C
RD5RW28CA	E	2	8	C
RD5RW29CA	E	2	9	C
RD5RW30CA	E	3	0	C

Part Number	Product Code			
	①	②	③	④
RD5RW31CA	E	3	1	C
RD5RW32CA	E	3	2	C
RD5RW33CA	E	3	3	C
RD5RW34CA	E	3	4	C
RD5RW35CA	E	3	5	C
RD5RW36CA	E	3	6	C
RD5RW37CA	E	3	7	C
RD5RW38CA	E	3	8	C
RD5RW39CA	E	3	9	C
RD5RW40CA	E	4	0	C
RD5RW41CA	E	4	1	C
RD5RW42CA	E	4	2	C
RD5RW43CA	E	4	3	C
RD5RW44CA	E	4	4	C
RD5RW45CA	E	4	5	C
RD5RW46CA	E	4	6	C
RD5RW47CA	E	4	7	C
RD5RW48CA	E	4	8	C
RD5RW49CA	E	4	9	C
RD5RW50CA	E	5	0	C
RD5RW51CA	E	5	1	C
RD5RW52CA	E	5	2	C
RD5RW53CA	E	5	3	C
RD5RW54CA	E	5	4	C
RD5RW55CA	E	5	5	C
RD5RW56CA	E	5	6	C
RD5RW57CA	E	5	7	C
RD5RW58CA	E	5	8	C
RD5RW59CA	E	5	9	C
RD5RW60CA	E	6	0	C