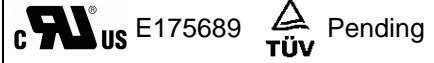




ECE —
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SURFACE MOUNT PTC RSS (0603) MODEL



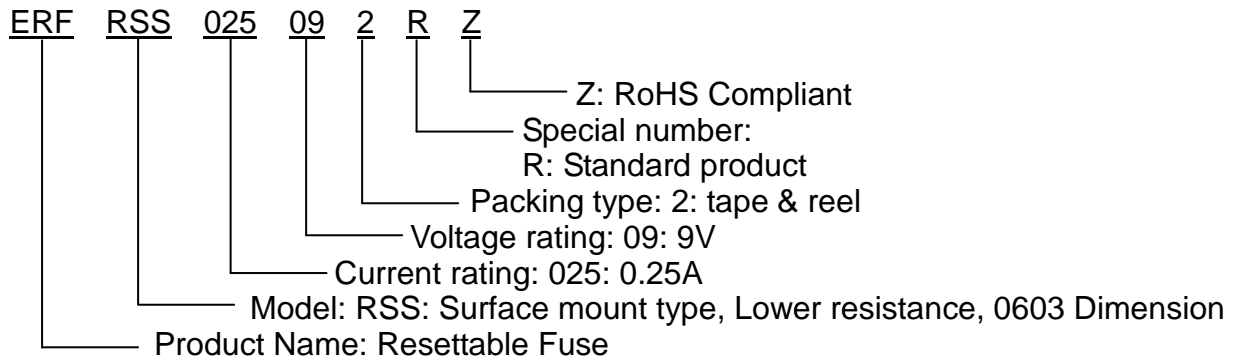
FEATURES

- 0603 Dimension, surface mount, solid state
- Faster time to trip than standard SMD devices
- Lower resistance than standard SMD devices
- Operation current: 0.25A~0.75A
- Maximum voltage: 6V~9Vdc
- Temperature range: -40°C to 85°C
- Tape and reel available on most models

APPLICATIONS

- ◆ Almost anywhere there High-density boards is a low voltage power supply and a load to be protected including:
 - Computers & peripherals
 - General electronics
 - Automotive applications

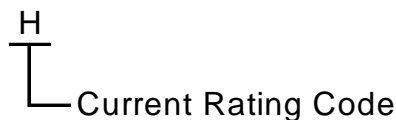
PART NUMBERING SYSTEM



Marking system



Example



H=ERFRSS025-09
I=ERFRSS035-06
J=ERFRSS050-06
K=ERFRSS075-06



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■ Electrical characteristics(23°C)

Part Number	Hold Current	Trip Current	Rated Voltage	Maximum Current	Typical Power	Max. Time to trip		Resistance Tolerance	
	I_H , A	I_T , A	V_{MAX} , V _{dc}	I_{MAX} , A	P_d , W	Amp	Sec	R_{MIN} Ω	R_{1MAX} Ω
RSS025	0.25	0.55	9	100	0.5	8.0	0.08	0.500	3.000
RSS035	0.35	0.75	6	100	0.5	8.0	0.10	0.200	1.000
RSS050	0.50	1.00	6	100	0.5	8.0	0.10	0.070	0.350
RSS075	0.75	1.50	6	100	0.5	8.0	0.20	0.050	0.250

I_H =Hold current-maximum current at which the device will not trip at 23°C still air.

I_T =Trip current-minimum current at which the device will always trip at 23°C still air.

V_{MAX} =Maximum voltage device can withstand without damage at rated current.

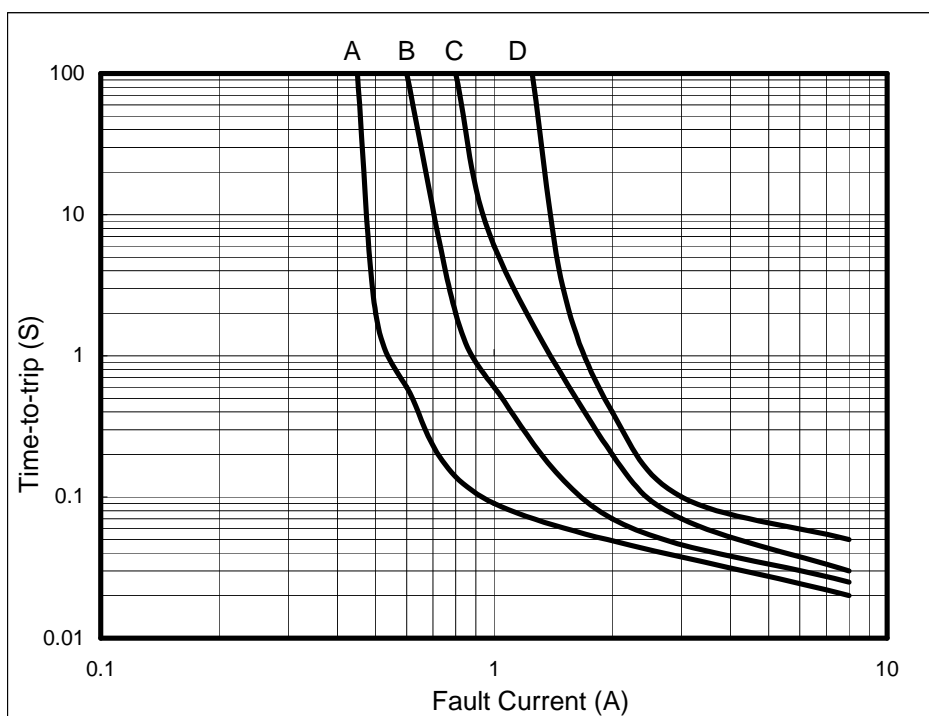
I_{MAX} = Maximum fault current device can withstand without damage at rated voltage (V max).

P_d =Typical power dissipated from device when in the tripped state in 23°C still air environment.

R_{MIN} =Minimum device resistance at 23°C.

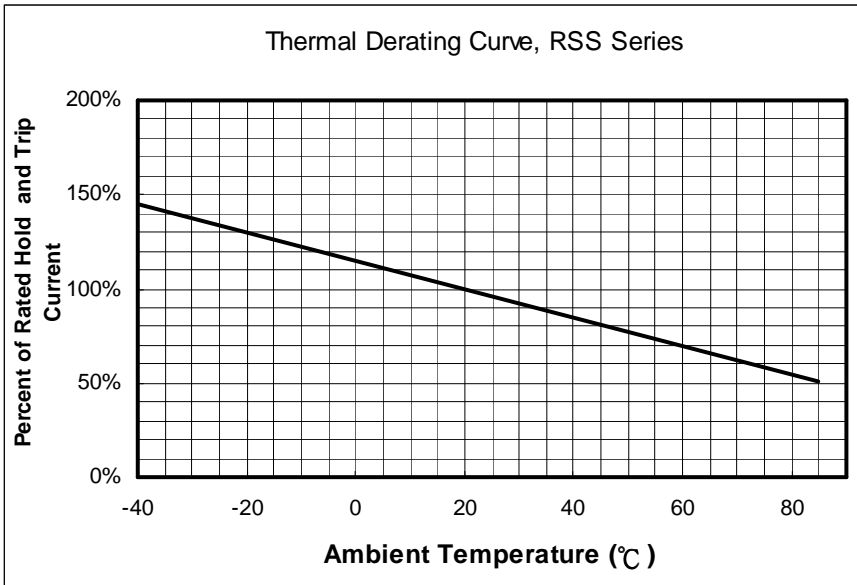
R_{1MAX} =Maximum device resistance at 23°C 1 hour after tripping .

■ Typical time-to-trip-at 23°C



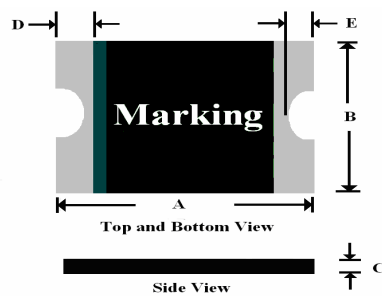
H=RSS025
I =RSS035
J=RSS050
K=RSS075

■ Thermal Derating Curve



■ RSS Product Dimensions (UNIT: mm)

Part Number	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
RSS025-09	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
RSS035-06	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
RSS050-06	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40
RSS075-06	1.40	1.80	0.45	1.00	0.35	0.75	0.10	0.50	0.08	0.40

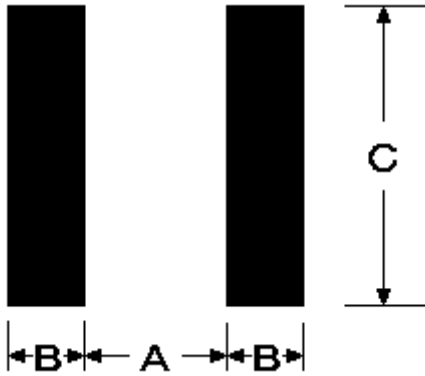


■ Standard Package for Reference

P/N	Reel/Tape	P/N	Reel/Tape	P/N	Reel/Tape
RSS025	4.0K	RSS050	4.0K		
RSS035	4.0K	RSS075	4.0K		

■ Pad Layouts and Soldering Reflow Recommendations

The dimension in the table below provide the recommended pad layout for each surface mount device



Pad dimensions(millimeters)			
Device	A Nominal	B Nominal	C Nominal
SL MODEL	5.10	2.30	5.60
SB MODEL	3.40	1.50	4.60
SD/RSD MODEL	3.45	1.78	3.50
SM/RSM MODEL	2.00	1.00	2.80
SN/RSN MODEL	2.00	1.00	1.90
SR/RSR MODEL	1.20	1.00	1.50
SS/RSS MODEL	0.80	0.60	0.80

■ SOLDERING REFLOW (LEAD FREE)

- 1.Suggested reflow methods: IR, vapor phase oven, hot air oven.
- 2.Recommended maximum paste thickness is 0.25mm.
- 3.Devices are not designed to wave soldered to the bottom side of the board.

■ CAUTION

If reflow temperatures exceed the recommended standard, devices may not be able to meet the performance requirements.

