

SURFACE MOUNT PTC SR (0805) MODEL



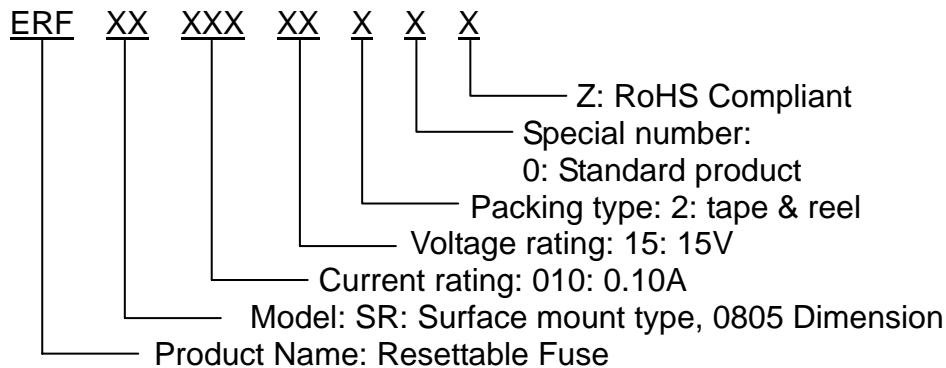
■ FEATURES

- 0805 Dimension, surface mount, solid state
- Faster time to trip than standard SMD devices
- Lower resistance than standard SMD devices
- Operation current: 100mA~1.0A
- Maximum voltage: 6V~15Vdc
- Temperature range: -40°C to 85°C
- Tape and reel available on most models

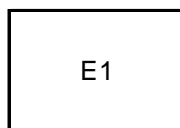
■ APPLICATIONS

- ◆ 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

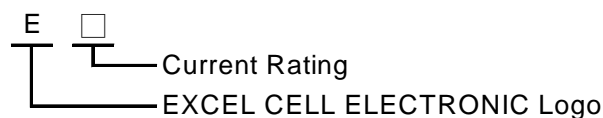
■ PART NUMBERING SYSTEM



■ Marking system



Example



- E1=ERFSR010
- E2=ERFSR020
- E3=ERFSR035
- E5=ERFSR050
- E7=ERFSR075
- E0=ERFSR100

NOTE: Specifications subject to change without prior notice.

■ 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}	R _{1MAX}
	Ω	Ω							
SR010	0.10	0.30	15	100	0.5	0.5	1.50	0.700	6.000
SR020	0.20	0.50	9	100	0.5	8.00	0.02	0.400	3.500
SR035	0.35	0.75	6	100	0.5	8.00	0.10	0.250	1.200
SR050	0.50	1.00	6	100	0.5	8.00	0.10	0.150	0.850
SR075	0.75	1.50	6	40	0.5	8.00	0.20	0.090	0.350
SR100	1.00	1.95	6	40	0.6	8.00	0.30	0.060	0.210

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).

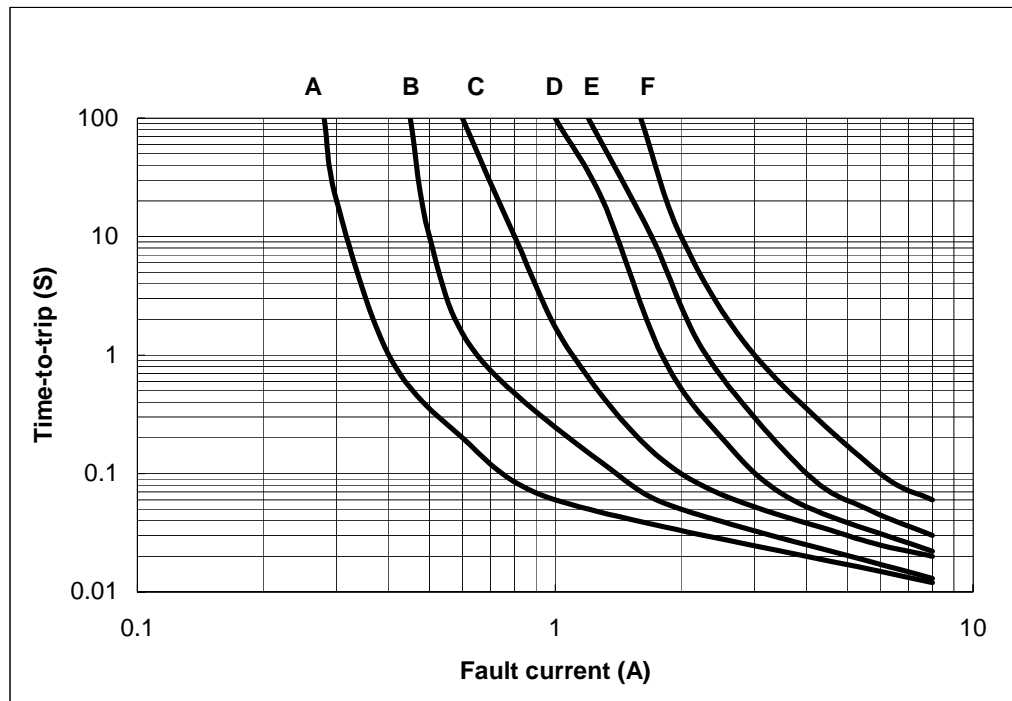
P_d=Typical power dissipated from device when in the tripped state in 23°C still air environment.

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

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

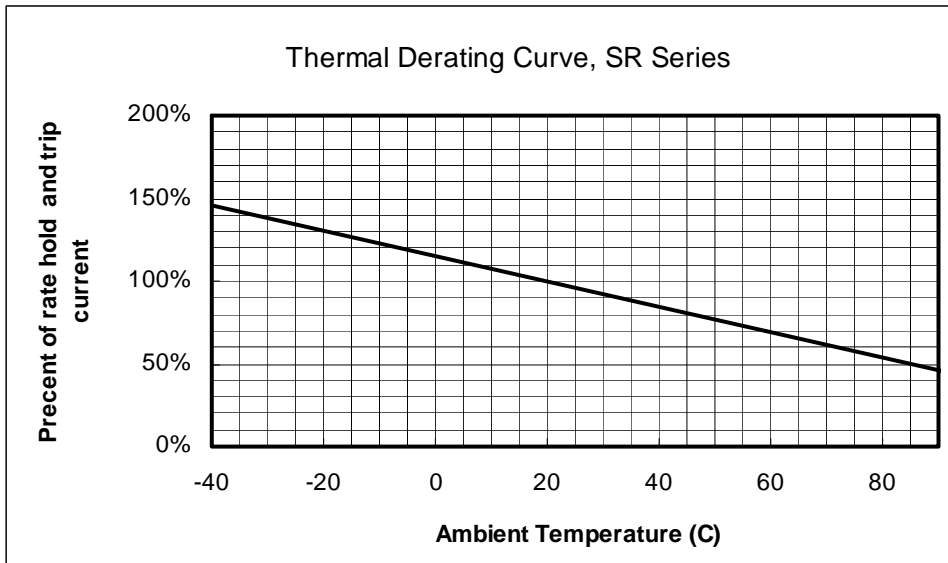
■ Typical time-to-trip-at 23°C

A=SR010-15
 B=SR020-09
 C=SR035-06
 D=SR050-06
 E=SR075-06
 F=SR100-06



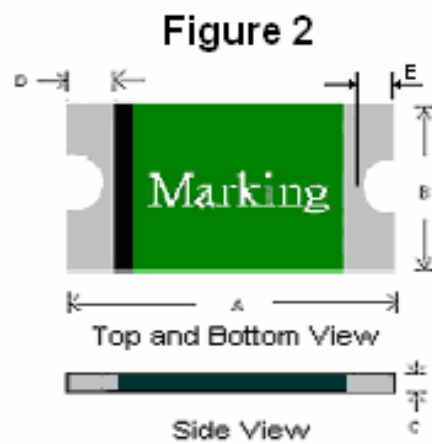
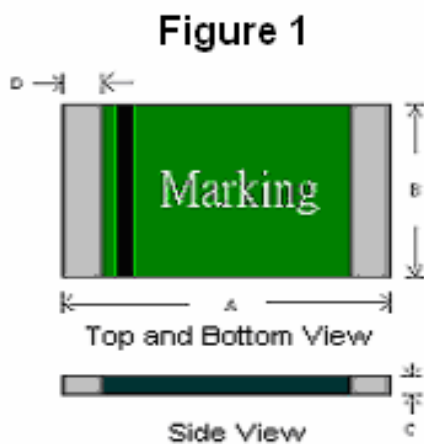
NOTE: Specifications subject to change without prior notice.

■ Thermal Derating Curve



■ SR Product Dimensions (UNIT: mm)

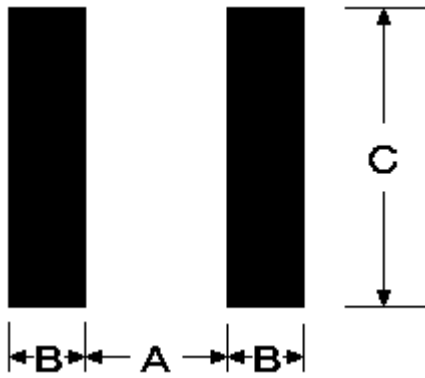
Part Number	A		B		C		D		E		Figure
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
SR010-15	2.00	2.30	1.20	1.50	0.55	1.00	0.20	0.60	-----	-----	1
SR020-09	2.00	2.30	1.20	1.50	0.55	1.00	0.20	0.60	-----	-----	1
SR035-06	2.00	2.30	1.20	1.50	0.45	0.75	0.20	0.60	-----	-----	1
SR050-06	2.00	2.20	1.20	1.50	0.55	1.25	0.20	0.60	0.10	0.45	2
SR075-06	2.00	2.20	1.20	1.50	0.55	1.25	0.20	0.60	0.10	0.45	2
SR100-06	2.00	2.20	1.20	1.50	0.75	1.80	0.20	0.60	0.10	0.45	2



NOTE: Specifications subject to change without prior notice.

■ Pad Layouts and Soldering Reflow Recommendations

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



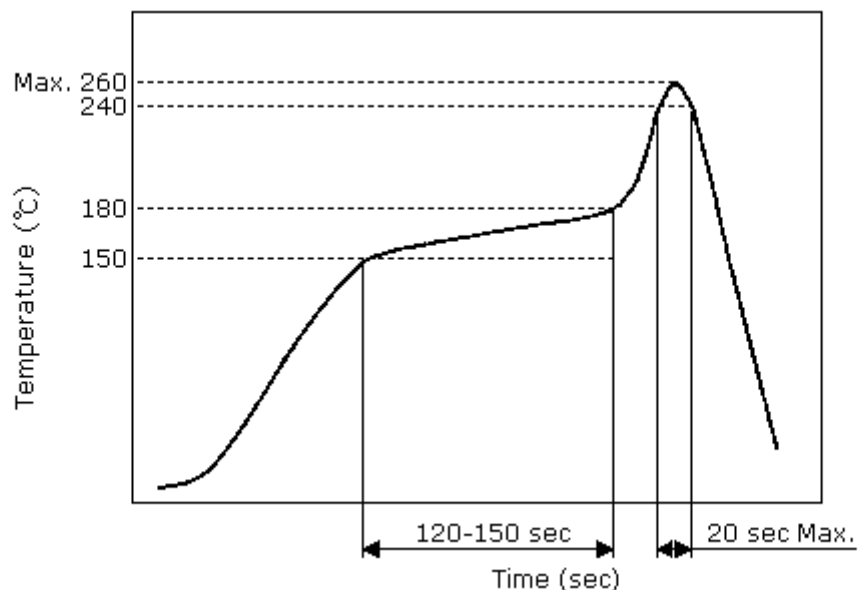
Pad dimensions(millimeters)			
Device	A Nominal	B Nominal	C Nominal
SL MODEL	5.10	2.30	5.60
SD MODEL	3.45	1.78	3.50
SM MODEL	2.00	1.00	2.80
SN MODEL	2.00	1.00	1.90
SR MODEL	1.20	1.00	1.50

■ 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.



NOTE: Specifications subject to change without prior notice.