

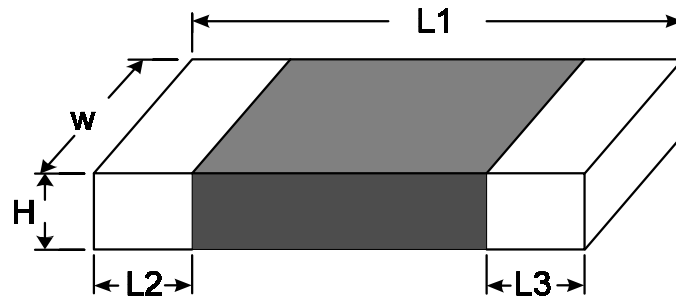
INDEX	Page
■ Part Number Code	1
■ Structure and Dimensions	2
■ Electrical Characteristics	2
■ Reliability	3
■ Soldering Recommendation	4
■ Recommended Soldering Pad Dimensions	5
■ RoHS Compliant Declaration	5
■ Storage Conditions of Products	5
■ Packaging	6
■ Certificates & Test Report	7
■ Protective Threshold Current Range	8

Part Number Code

Example :

SMD **0805** **15R** **M** **040** **20**
 (1) (2) (3) (4) (5) (6)

No.	Item	Digit	Specification
(1)	Product Type	SMD	Sinochip SMD thermistor type
(2)	Size (EIA)	0805	0805
(3)	Zero Power Resistance at 25 °C	15R	15Ω
(4)	Tolerance of R ₂₅	M	± 20%
(5)	Non-operating Current (at +60°C)	40	I _{hold} =40mA
(6)	Maximum Voltage (V)	20	20V

Structure and Dimensions

(unit : mm)

L1	W	H max.	L2 and L3
2.00±0.2	1.25±0.2	0.95	0.40±0.20

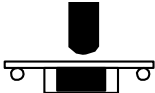
Electrical Characteristics

Part No.	Curie Point Temperature	Zero Power Resistance at 25°C	Non-operating Current (at +60°C)	Non-operating Current (at +25°C)
	T _c (°C)	R ₂₅ (Ω)	(mA)	(mA)
SMD0805-15RM040-20	100±10	15±20%	40	59

Part No.	Trip Current (at +25°C)	Trip Current (at -10°C)	Max. Voltage	Max. Current
	(mA)	(mA)	V _{max} (V _{DC})	I _{max} (mA)
SMD0805-15RM040-20	116	140	20	1600

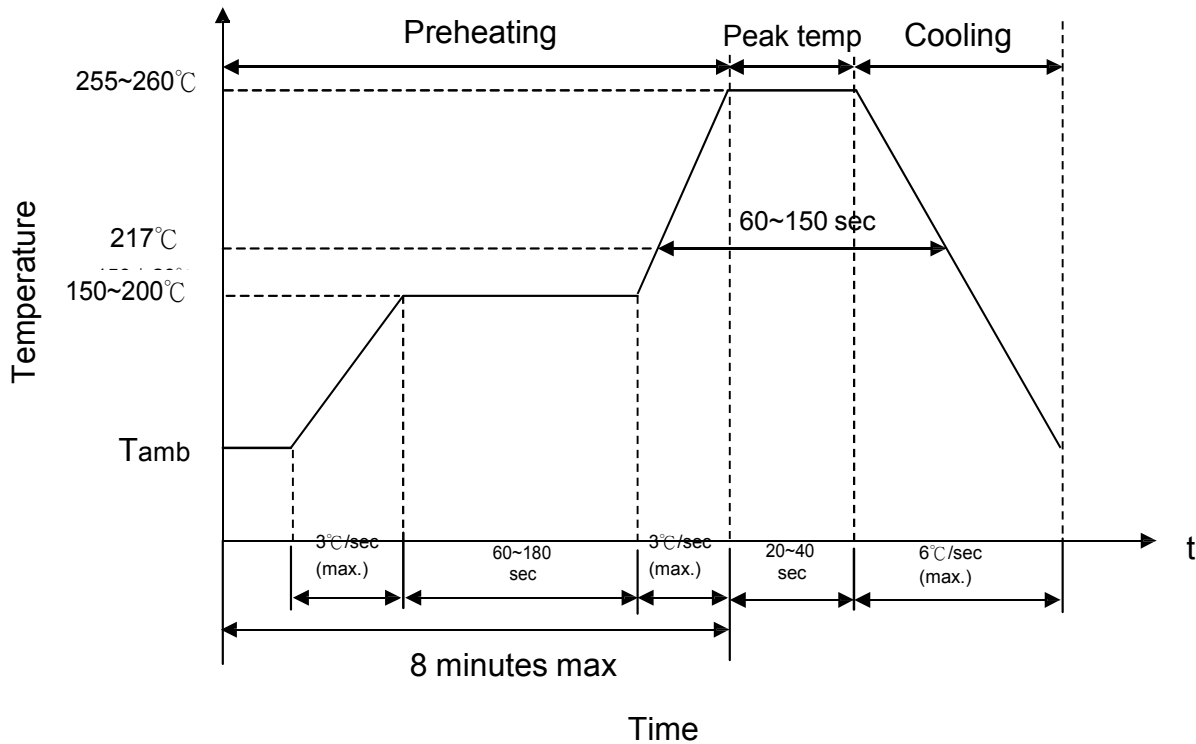
Part No.	Operating Temperature Range(at V=0)	Operating Temperature Range(at V _{max} .)
	(°C)	(°C)
SMD0805-15RM040-20	-40 ~ +125	-10 ~ +60

Reliability

Item	Standard	Test conditions / Methods	Specifications															
Bending Strength	Specification Standard	Warp : 3mm ; Speed < 0.5mm/sec. Duration : 10 sec on PCB. 	No visible damage ΔR ₂₅ /R ₂₅ ≤ 10 %															
Damp Heat, Steady State	IEC 60068-2-3	60 ± 2 °C , 90 ~ 95% RH , 1000± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
High Temp. Storage	IEC 60738-1 IEC 60068-2-2	125 ± 3 °C , 1000 ± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Low Temp. Storage	Specification Standard	-40 ± 3 °C , 1000 ± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Rapid Change of Temperature	IEC 60068-2-14	The conditions shown below shall be repeated 5 cycles on PCB <table><tr><th>Step</th><th>Temperature (°C)</th><th>Period (minutes)</th></tr><tr><td>1</td><td>-40 ± 5</td><td>30 ± 3</td></tr><tr><td>2</td><td>Room temperature</td><td>5 ± 3</td></tr><tr><td>3</td><td>125 ± 5</td><td>30 ± 3</td></tr><tr><td>4</td><td>Room temperature</td><td>5 ± 3</td></tr></table>	Step	Temperature (°C)	Period (minutes)	1	-40 ± 5	30 ± 3	2	Room temperature	5 ± 3	3	125 ± 5	30 ± 3	4	Room temperature	5 ± 3	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %
Step	Temperature (°C)	Period (minutes)																
1	-40 ± 5	30 ± 3																
2	Room temperature	5 ± 3																
3	125 ± 5	30 ± 3																
4	Room temperature	5 ± 3																
High Temp. Endurance Load	IEC 60738-1	60 ± 3 °C , Vmax. for 1.5hrs on / 0.5hrs off , 1000 ± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Climatic Sequence	IEC 60738-1	a. 125°C x 16 hrs b. 1st cycle : 40 °C 95 %RH x 24 hrs c. -40 °C x 2 hrs d. 5 cycles : 40°C 95% RH x 24 hrs / Cycle	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Solderability	IEC 60068-2-58	245 ± 5 °C , 3 ± 0.3 sec	At least 95% of terminal electrode is covered by new solder															
Resistance to Soldering Heat	IEC 60068-2-58	260 ± 5 °C , 10 ± 1 sec	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															

Soldering Recommendation

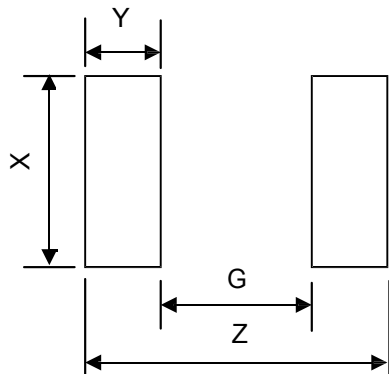
◆ IR-Reflow Soldering Profile



◆ Recommended Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 sec (max.)
Diameter of Soldering Iron-tip	φ 3mm (max.)

Recommended Soldering Pad Dimensions



Size (EIA)	0805
Z	3.4 mm
G	1.0 mm
X	1.4 mm
Y	1.2 mm

RoHS Compliant Declaration

We hereby declare that the components delivered to your company are compliant with RoHS directive 2002/95/EC.

Storage Conditions of Products

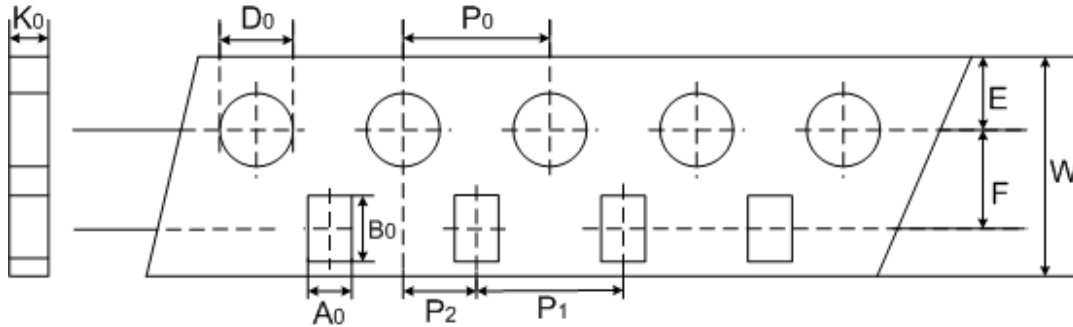
(I) Storage Conditions :

- 1.Storage Temperature : -10°C~+40°C
- 2.Relative Humidity : $\leq 75\%RH$
- 3.Keep away from corrosive atmosphere and sunlight.

(II) Period of Storage : 1 year

Packaging

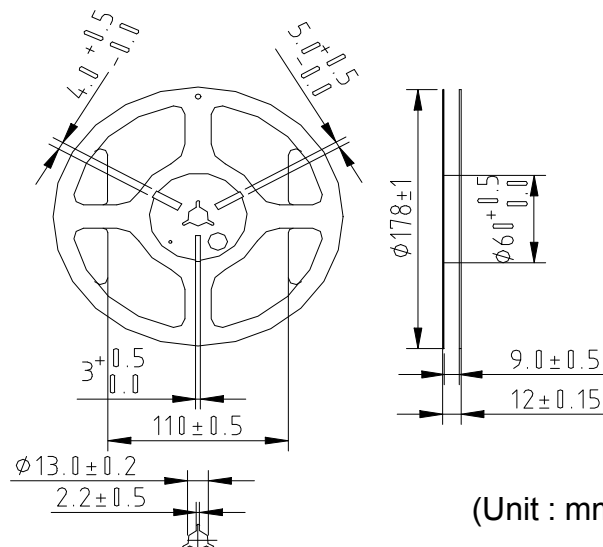
■ Taping specification (0603 type)



(Unit : mm)

Index	A_0	B_0	W	E	F	P_1	P_2	P_0	D_0	K_0
Type	± 0.2	± 0.2	± 0.2	± 0.1	± 0.05	± 0.1	± 0.05	± 0.1	± 0.1	± 0.1
0805	1.5	2.3	8	1.75	3.5	4	2	4	1.55	0.95

■ Quantity (3500 pcs / reel)



(Unit : mm)

Certificates

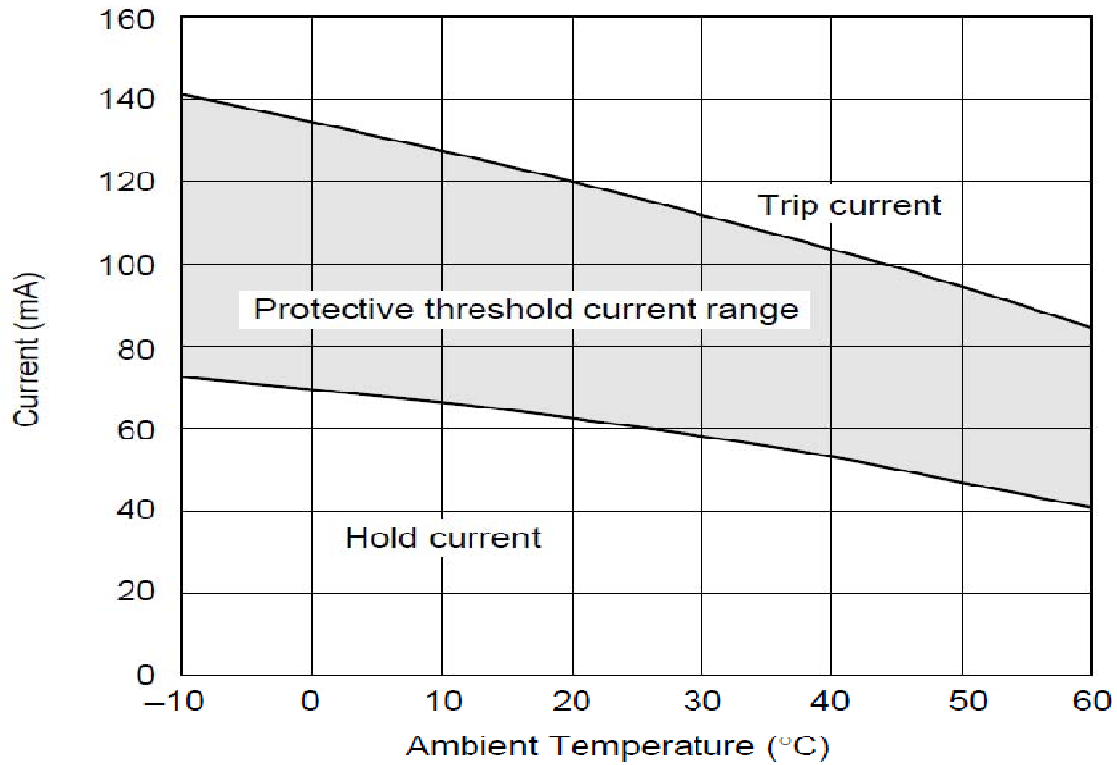
- (1) TS 16949 certificate
- (2) ISO 9001 certificate
- (3) QC 080000 certificate

Test Report

- (1) RoHS test report
- (2) Halogen-free test report

Protective Threshold Current Range

SMD0805-15RM040-20



SMD0805-15RM040-20

