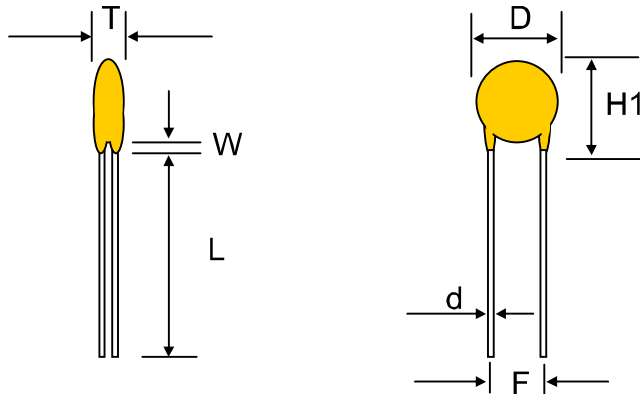




Structure and Dimensions



(Unit : mm)

Body Size	D max.	T max.	F±1.0	d±0.05	L min	W max	H1 max
Φ 5 mm	6.0	3.5	3.5	0.5	25.0	3.0	8.0

Material of coating : Epoxy powder

Color of coating : Yellowish brown

Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Tolerance of R ₂₅	B25/50 Value	Tolerance of B Value	Max. Power Rating at 25°C
		R ₂₅ (KΩ)	(± %)	(K)	(± %)
	Option	Option	Option	Option	450

Part No.	Dissipation Factor	Thermal Time Constant	Operating Temperature Range
		δ (mW/°C)	τ (sec.)
	7.5	18	-40 ~ +125



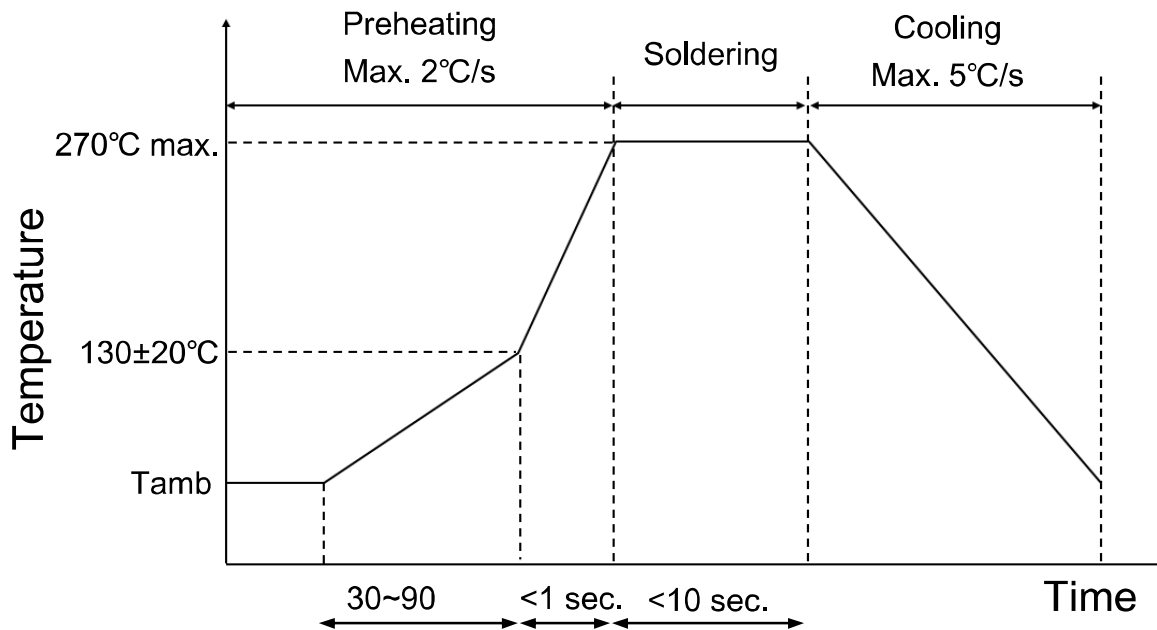
Reliability

Item	Standard	Test conditions/Methods	Specifications															
Terminal pull strength	IEC 60068-2-21	Gradually applying the force and keeping the unit fixed for 10±1 sec. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Terminal diameter (mm)</td> <td style="text-align: center;">Force (Kg)</td> </tr> <tr> <td style="text-align: center;">0.3<d ≤ 0.5</td> <td style="text-align: center;">0.5</td> </tr> <tr> <td style="text-align: center;">0.5<d ≤ 0.8</td> <td style="text-align: center;">1.0</td> </tr> </table>	Terminal diameter (mm)	Force (Kg)	0.3<d ≤ 0.5	0.5	0.5<d ≤ 0.8	1.0	No visible damage									
Terminal diameter (mm)	Force (Kg)																	
0.3<d ≤ 0.5	0.5																	
0.5<d ≤ 0.8	1.0																	
Bending Strength of Terminals	IEC 60068-2-21	Hold specimen and apply the force specified below to each lead. Bend the specimen to 90° , then return to the original position. Repeat the procedure in the opposite direction. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Terminal diameter (mm)</td> <td style="text-align: center;">Force (Kg)</td> </tr> <tr> <td style="text-align: center;">0.3<d ≤ 0.5</td> <td style="text-align: center;">0.25</td> </tr> <tr> <td style="text-align: center;">0.5<d ≤ 0.8</td> <td style="text-align: center;">0.50</td> </tr> </table>	Terminal diameter (mm)	Force (Kg)	0.3<d ≤ 0.5	0.25	0.5<d ≤ 0.8	0.50	No visible damage									
Terminal diameter (mm)	Force (Kg)																	
0.3<d ≤ 0.5	0.25																	
0.5<d ≤ 0.8	0.50																	
Solderability	IEC 60068-2-20	245±3°C, 3±0.3 sec	At least 95% of terminal electrode is covered by new solder															
Resistance to Soldering Heat	IEC 60068-2-20	260±5°C, 10±1 sec	No visible damage △R25 ≤ ±3%															
High Temperature Storage	IEC 60068-2-2	125±5°C, 1000hrs	No visible damage △R25 ≤ ±5%															
Damp Heat Steady State	IEC 60068-2-3	40±2°C , 90~95% RH, 1000±24hrs	No visible damage △R25 ≤ ±3%															
Rapid Change of Temperature	IEC 60068-2-14	The conditions shown below shall be repeated 5 cycles <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Period (minutes)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">-40±5</td> <td style="text-align: center;">30±3</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">Room temperature</td> <td style="text-align: center;">5±3</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">125±5</td> <td style="text-align: center;">30±3</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">Room temperature</td> <td style="text-align: center;">5±3</td> </tr> </tbody> </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 △R25 ≤ ±3%
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																
Life Test	IEC 60539-14.26.3	25±5°C , Pmax, 1000hrs	No visible damage △R25 ≤ ±5%															



Soldering Recommendation

■ Wave Flow Soldering Profile

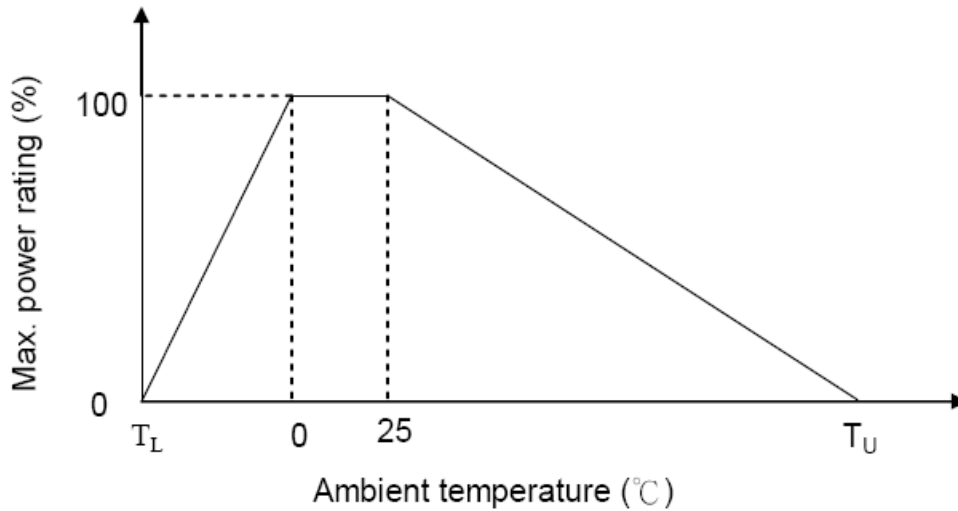


■ Recommended Reworking Conditions With Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	380°C (max.)
Soldering Time	2 sec (max.)
Distance form NTC Thermistor	6 mm (min.)



Power Derating Curve



Note : T_L = Minimum operating temperature (°C)

T_U = Maximum operating temperature (°C)

RoHS Compliant Declaration

We hereby declare that the components delivered to your company are compliant with RoHS directive 2011/65/EU

Storage condition of products

(I) Storage Conditions :

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

(II) Period of Storage : 1 year



Safety Approvals

(Model No. : JCR)



* UL 1434 recognized (File # E171531)



* TÜV / EN60539-1:2008 recognized
(File # R 50357749)

Certificate

(1) ISO 9001 certificate

Tset Report

(1) RoHS SGS test report

(2) RoHS2.0 SGS test report

(2) Halogen-free test report