

Switching Diode	Power Dissipation - 400 mWatts
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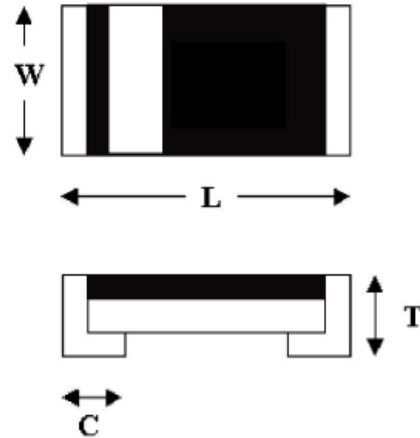
Features

- Silicon epitaxial planar diode
- SMD chip pattern, available in various dimension included 0805
- Leadfree and RoHS compliance components
- For AC switching input as rectified circuit and high reverse voltage location

Mechanical Data

- Size: 1206
- Weight: approx. 10mg
- Marking: Cathode terminal

1206



Dimension/mm	1206
L	3.2±0.2
W	1.5±0.2
T	0.75±0.1
C	0.55±0.2

Package Outline Dimensions in Millimeters

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristics	Symbol	Value	Unit
Forward Power Dissipation Power derating above 25°C	P _{tot}	400	mW
		3.2	mW/ °C
Junction Temperature	T _j	150	°C
Thermal Resistance Junction to Ambient air	R _{θJA}	375	°C/W
Operating & Storage Temperature range	T _{stg}	-55 to +150	°C
Repetitive Peak Reverse Voltage	V _{RRM}	100	v
Average rectified current sin half wave rectification with resistive load	I _{F(AV)}	150	mA
Repetitive Peak Forward Current at T _{amb} =25°C	I _{FRM}	300	mA
Non-Repetitive Surge Forward Current at t<1s and T _j =25°C at t≤8.3ms and T _j =25°C	I _{FSM}	500	mA
		1000	
Forward Voltage at I _F =10mA at I =100mA	V _F	1.0 MAX	V
		1.25 MAX	V
Leakage Current at V _R =20V	I _R	0.025 MAX	uA
Leakage Current at V =80V		0.5 MAX	uA
Capacitance at V _R =0V, f=1MHz	C _{tot}	4 MAX	pF
Reverse Recovery Time at I _F =I _R =10mA, R _L =100Ω	t _{rr}	4 MAX	ns

Notes: Valid provided that electrodes are kept at ambient temperature.

Figure 3. Forward Current Derating

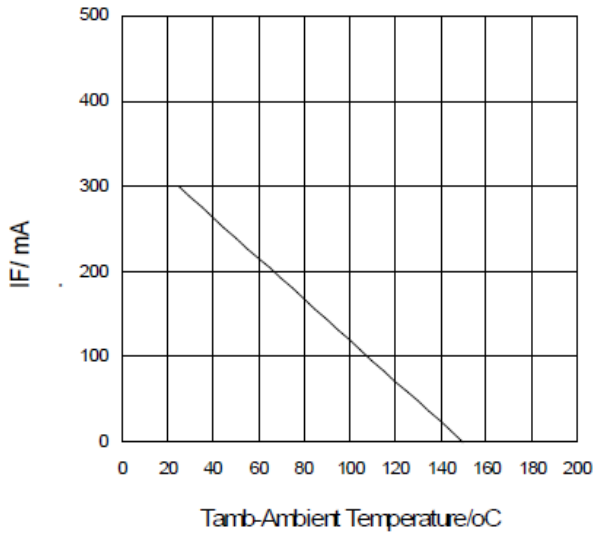


Figure 4. Reverse Voltage De-rating

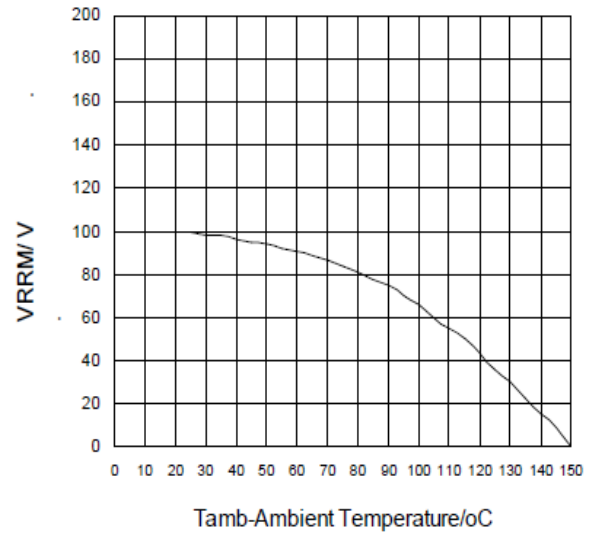


Figure 3. Forward Current Derating

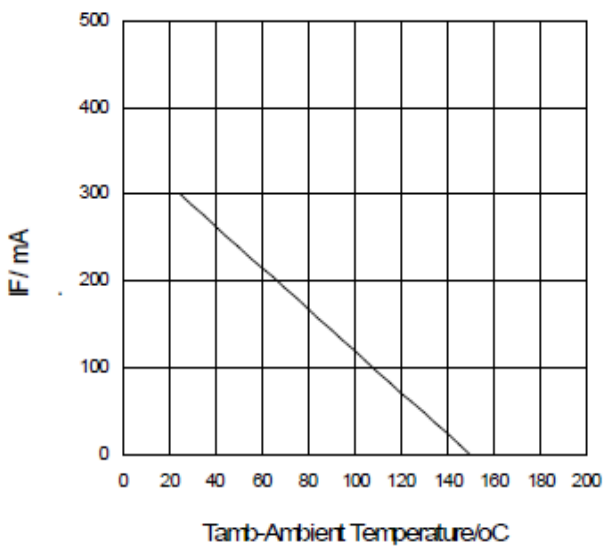
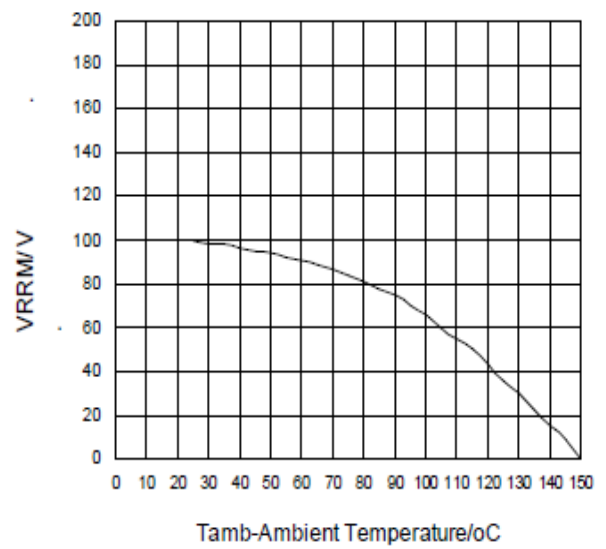


Figure 4. Reverse Voltage De-rating



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