



SWITCHING DIODE

FEATURES

- Silicon epitaxial planar diode
- Leadfree and RoHS compliance components
- For AC switching input as rectified circuit and high reverse voltage location

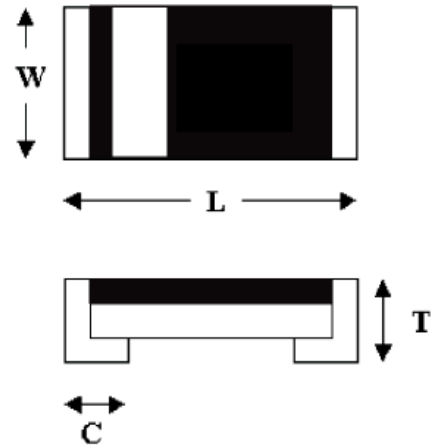
Mechanical Data

Size: 1206

Weight: approx. 10mg

Marking: Cathode terminal

1206



Dimension/mm	1206
L	3.2±0.2
W	1.5±0.2
T	0.85±0.1
C	0.55±0.2

THERMAL CHARACTERISTICS¹⁾

Parameter at Tamb=25°C ¹⁾	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

1)Valid provided that electrodes are kept at ambient temperature.

MAXIMUM RATING¹⁾

Parameter at Tamb=25°C ¹⁾	Symbol	Value	Unit
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 Tamb=25°C	I _{FRM}	300	mA
Non-Repetitive Surge Forward Current at t<1s and T _j =25°C at t<8.3s and T _j =25°C	I _{FSM}	500	mA
		1000	mA

1) Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS¹⁾

Parameter at Tamb=25°C ¹⁾	Symbol	Value	Unit
Forward Voltage at I _F =10mA at I _F =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 _R =80V		0.5 MAX	uA
Capacitance at V _R =0 V, f=1MHZ	C _{tot}	4 MAX	pF
Reverse Recovery Time at I _F =I _R =10mA, R _L =100Ω	t _{rr}	4 MAX	ns

1)Valid provided that electrodes are kept at ambient temperature.



Figure 1. Forward Characteristic

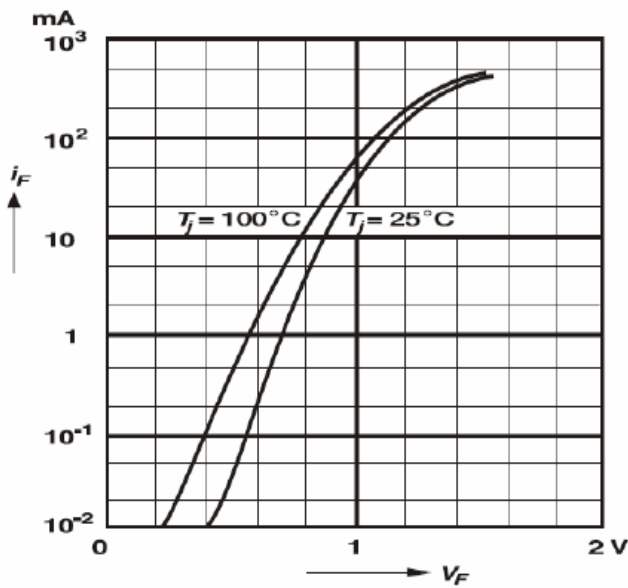


Figure 2. Power De-rating

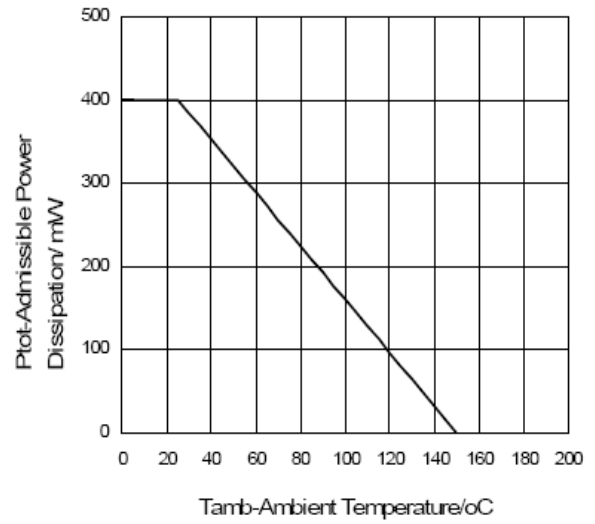


Figure 3. Forward Current De-rating

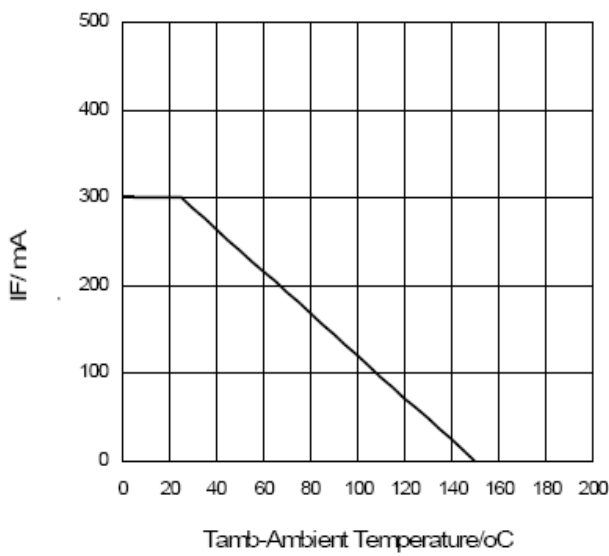
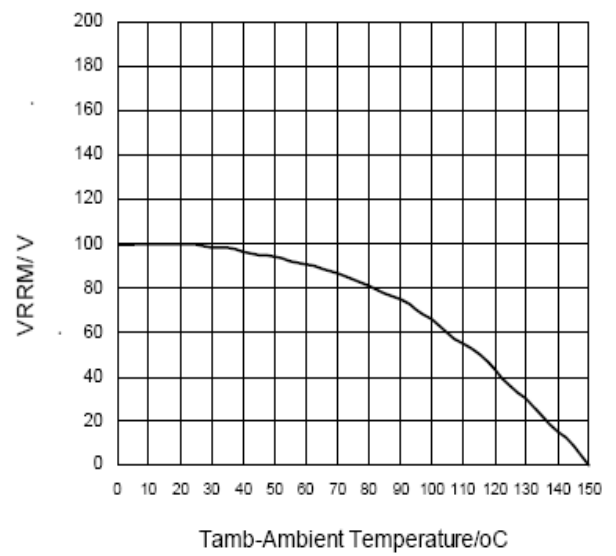


Figure 4. Reverse Voltage De-rating



The curve graph is for reference only.



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