

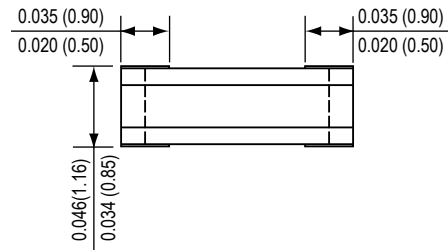
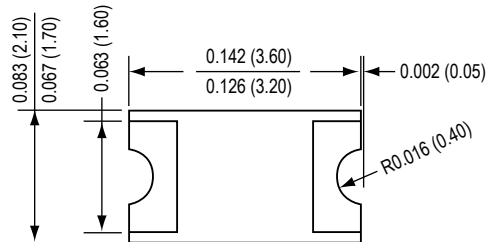
A suffix of "-C" indicates halogen-free & RoHS Compliant



1206 (SOD-123)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier , majority carrier conduction
- Low power loss , High efficiency
- High current capability
- High surge capacity
- RoHS Compliant Product



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

Terminals : Solder plated , solderable per MIL-STD-750, Method 2026

Polarity : Laser marking

Weight : 0.02 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SYMBOLS	SCDS0506	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800	V
Working Peak Reverse Voltage	V_{RMS}	800	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	0.5	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage at 0.5A	V_F	2.5	V
Maximum DC Reverse Current $T_a=25^{\circ}C$	I_R	5	uA
at Rated DC Blocking Voltage $T_a=125^{\circ}C$		50	
Maximum reverse recovery time	T_{rr}	35	nS
Typical Junction Capacitance (Note 1.)	C_j	10	pF
Operating Temperature Range	T_J	-50 ~ +125	°C
Storage Temperature Range	T_{STG}	-65 ~ +150	°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

FIG.1 - FORWARD CURRENT DERATING CURVE

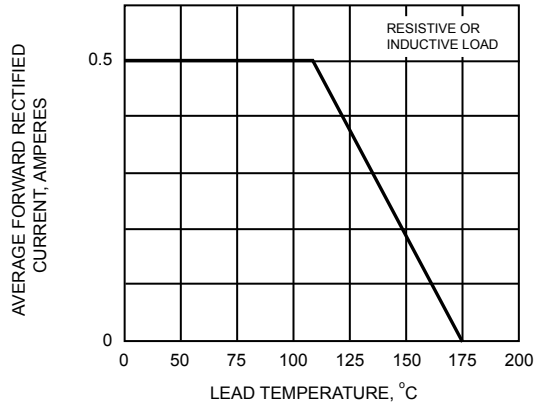


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

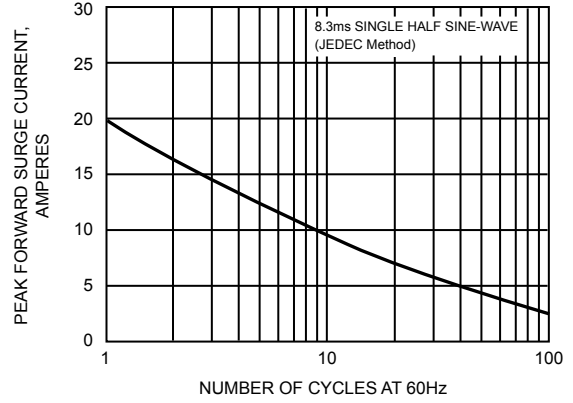


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

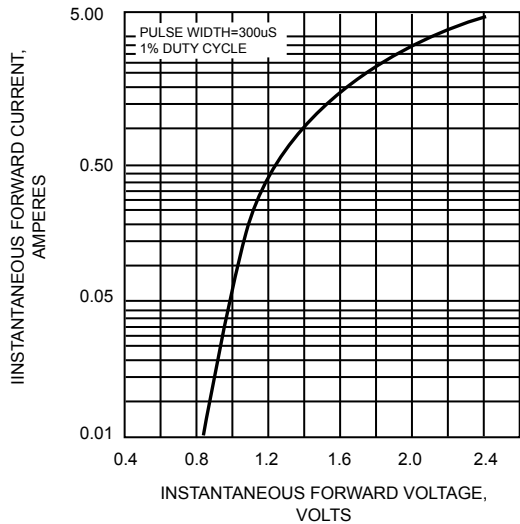


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

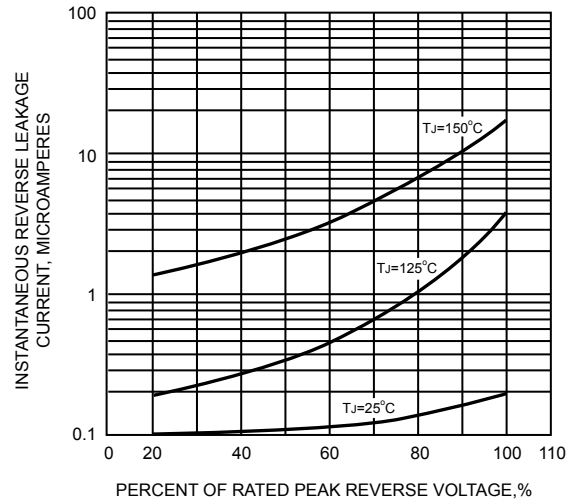


FIG.5 - TYPICAL JUNCTION CAPACITANCE

