

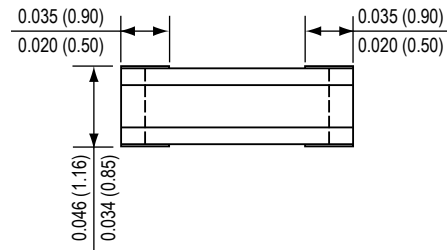
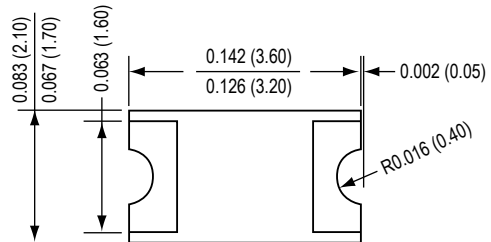
A suffix of "-C" indicates halogen-free & RoHS Compliant



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	SCDS104	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	V
Working Peak Reverse Voltage	$V_{RMS}$	400	V
Maximum DC Blocking Voltage	$V_{DC}$	400	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	1	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30	A
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.05	V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	$I_R$	5	uA
at Rated DC Blocking Voltage $T_a=125^\circ\text{C}$		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:

- Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
- Marking: 147Z

FIG.1 - FORWARD CURRENT DERATING CURVE

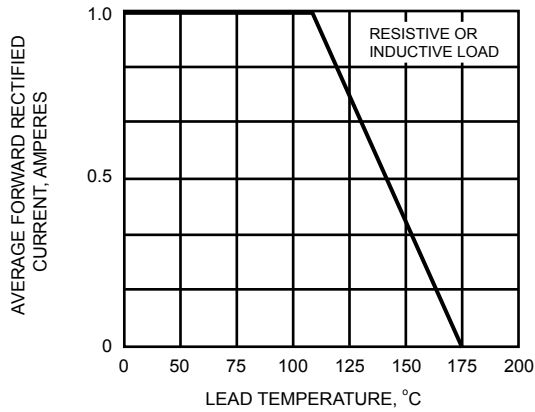


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

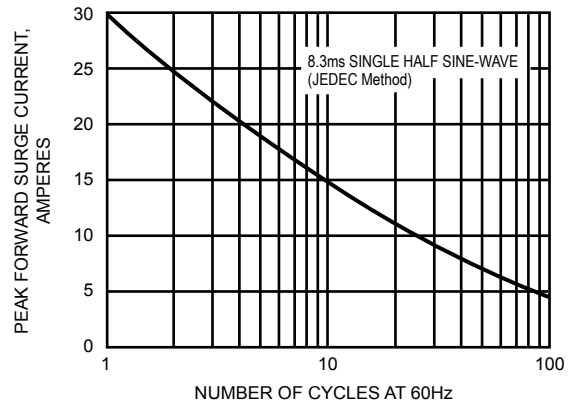


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

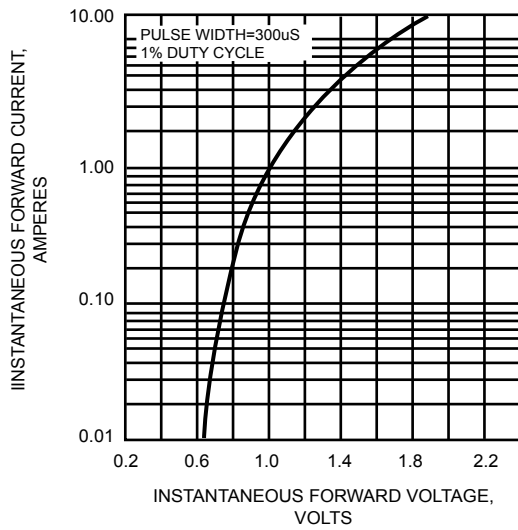


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

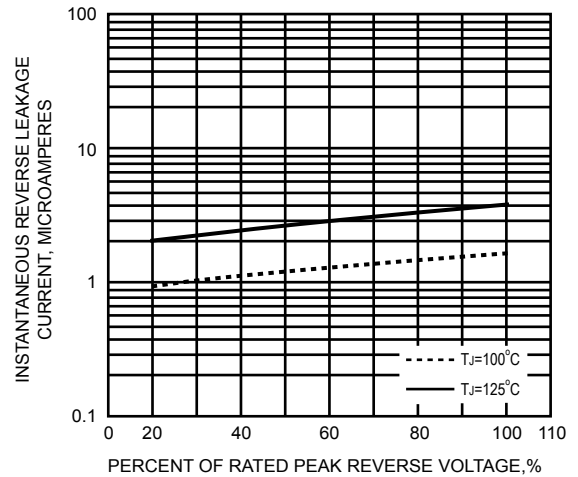


FIG.5 - TYPICAL JUNCTION CAPACITANCE

