

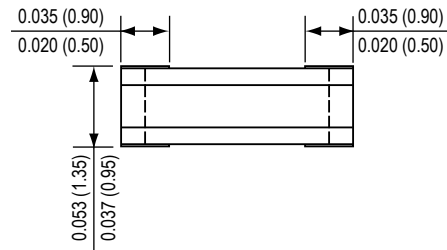
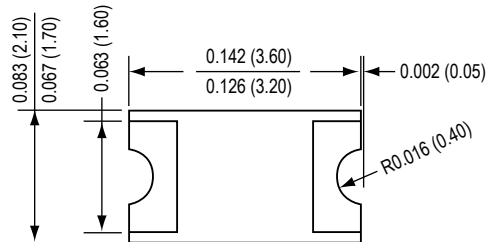
A suffix of "-C" specifies halogen & lead-free



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	SCD4003	SCD4004	SCD4005	SCD4006	SCD4007	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RMS}	200	400	600	800	1000	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	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					V
Maximum DC Reverse Current (Note1) $T_a=25^\circ\text{C}$	I_R	1					uA
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$		30					
Typical thermal resistance (NOTE 2)	$R_{\theta JL}$	28					°C/W
Typical Junction Capacitance (Note1)	C_j	12					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.
- Mounted on P.C. board with 0.2 x 0.2"(5.0 x 5.0mm) copper pad areas.
- Marking: SCD4003 : 17ZD
SCD4004 : 17ZG
SCD4005 : 17ZJ
SCD4006 : 17ZK
SCD4007 : 17ZM

FIG.1 - FORWARD CURRENT DERATING CURVE

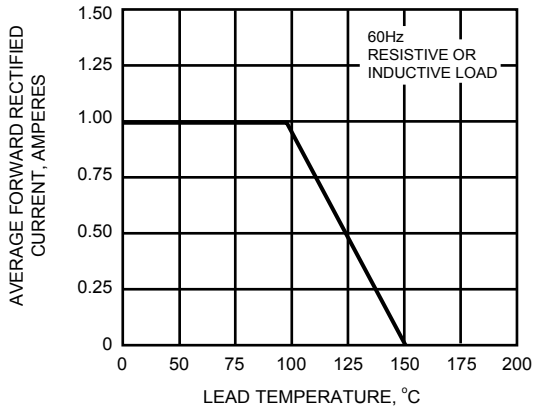


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

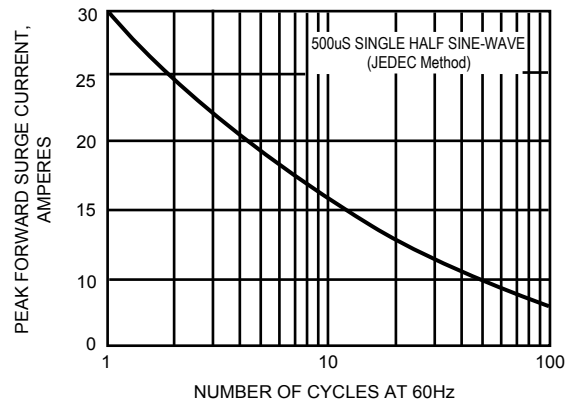


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

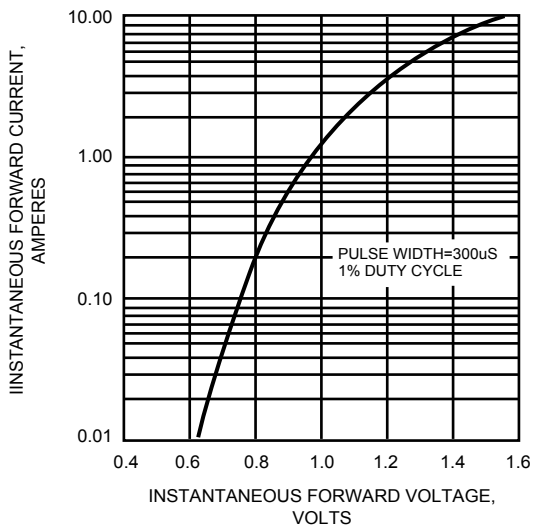


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

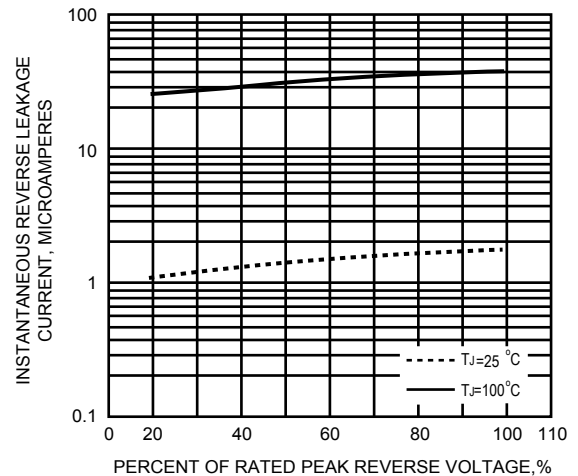


FIG.5 - TYPICAL JUNCTION CAPACITANCE

