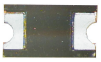
Elektronische Bauelemente

SCD0803 THRU SCD0806

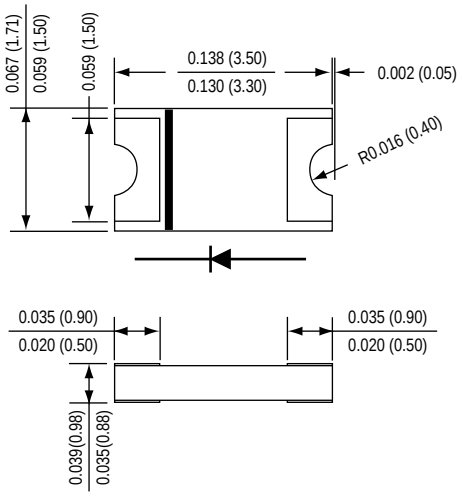
VOLTAGE 200V ~800V

0.8 AMP Glass Passivated Ultra Fast Recovery Rectifier

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



1206-S



Dimensions in inches and (millimeters)

FEATURES

- *RoHS Compliant Product
- *Leadless chip form , no lead damage
- *Lead-free solder Joint , No Wire bond & Lead Frame
- *Low profile package
- *For surface mounted applications
- *Built-in strain relief
- *Low power loss , High efficiency
- *High current capability
- *High surge capacity
- *Plastic package has Underwriters Laboratory Flammability
- Classification 94V-0

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Pure Tin plated (Lead-Free),
solderable per MIL-STD-750, Method 2026.
Polarity : Laser marking
Weight : 0.012 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	*SYMBOLS*	***SCD0803***	***SCD0804***	***SCD0805***	***SCD0806***	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	560	Volts
Maximum DC blocking voltage	V_{DC}	200	400	600	800	Volts
Maximum average forward rectified current (SEE FIG.1)	$I_{(AV)}$	0.8				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	15				Amps
Maximum instantaneous forward voltage at 0.8 A	V_F	0.96	1.30	1.70	2.50	Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	5 50				uA
Maximum reverse recovery time (NOTE 1)	trr	35				nS
Typical junction capacitance (NOTE 2)	C_J	10				pF
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175				°C

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR=1.0A, Irr=0.25A
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

Elektronische Bauelemente

SCD0803 THRU SCD0806

VOLTAGE 200V ~800V

0.8 AMP Glass Passivated Ultra Fast Recovery Rectifier

Characteristics Curve

FIG.1 - FORWARD CURRENT DERATING CURVE

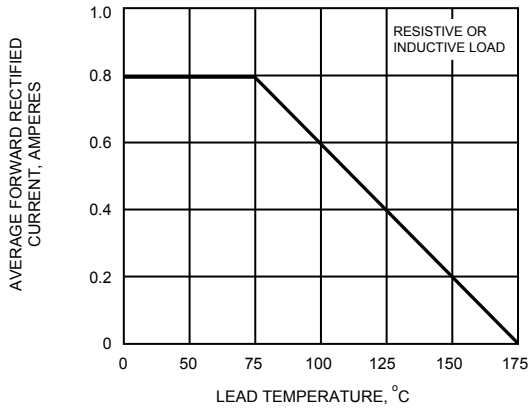


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

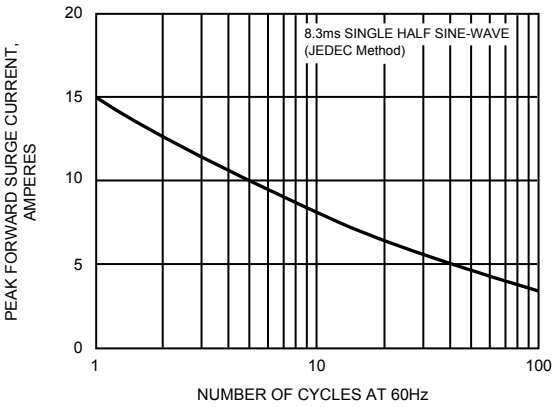


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

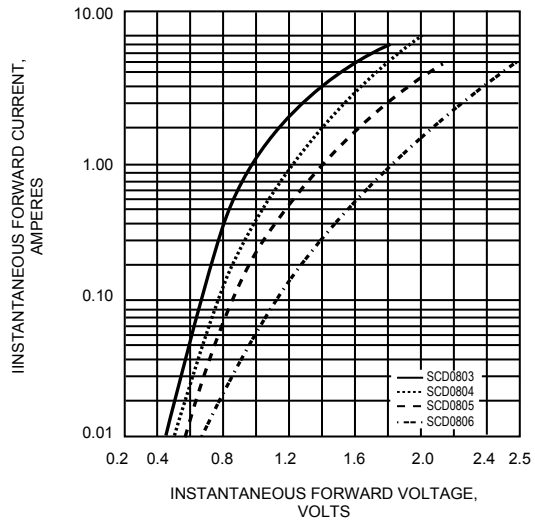


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

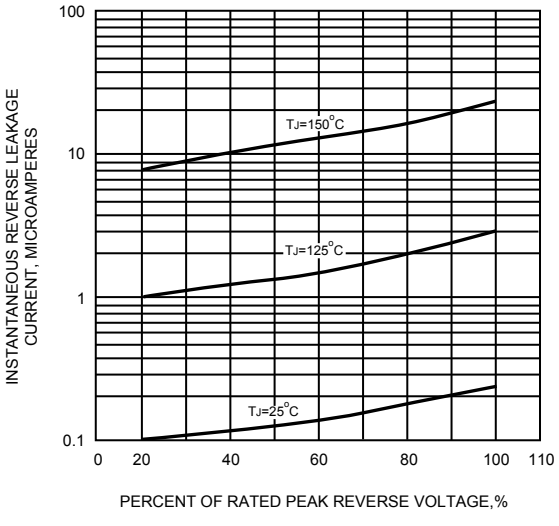


FIG.5 - TYPICAL JUNCTION CAPACITANCE

