

GE1A THRU GE1J

SURFACE MOUNT FAST ULTRAFAST RECTIFIER

VOLTAGE: 50 TO 600V

CURRENT: 1.0A



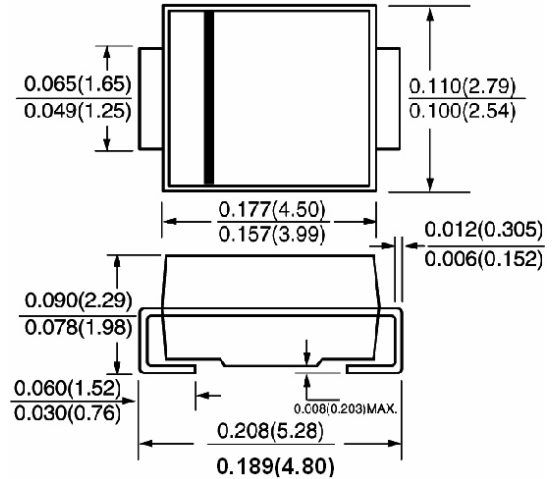
FEATURE

Ideal for surface mount pick and place application
 Low profile package
 Built-in strain relief
 High surge capability
 High temperature soldering guaranteed
 260°C/10sec/at terminals
 Glass passivated chip
 Ultrafast recovery time for high efficiency

MECHANICAL DATA

Terminal: Plated axial leads solderable per
 MIL-STD 202E, method 208C
 Case: Molded with UL-94 class V-0 recognized Flame
 Retardant Epoxy
 Polarity: color band denotes cathode

SMA / DO-214AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

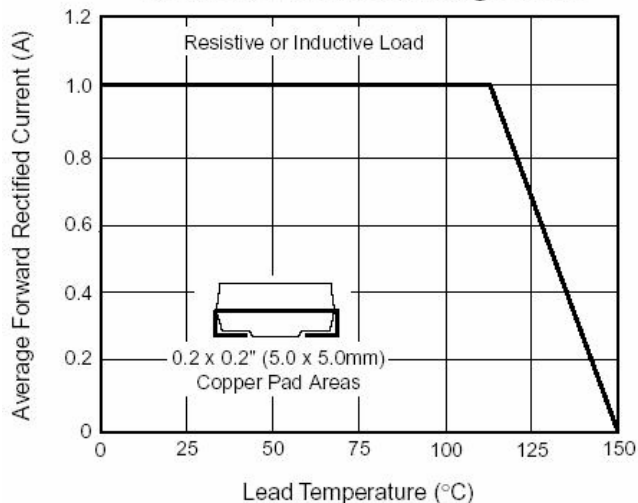
	SYMBOL	GE 1A	GE 1B	GE 1D	GE 1G	GE 1J	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	400	600	V
Maximum RMS Voltage	V _{rms}	35	70	140	280	420	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	400	600	V
Maximum Average Forward Rectified Current 3/8" lead length at T _L =110°C	I _{f(av)}	1.0					A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	I _{fsm}	30.0					A
Maximum Forward Voltage at rated forward current	V _f	0.95		1.25		1.7	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I _r	10.0 100.0					μA μA
Maximum Reverse Recovery Time (Note1)	T _{rr}	35				50	nS
Typical Junction Capacitance (Note 2)	C _j	10.0					pF
Typical Thermal Resistance (Note 3)	R(jl)	30.0					°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-50 to +150					°C

Note:

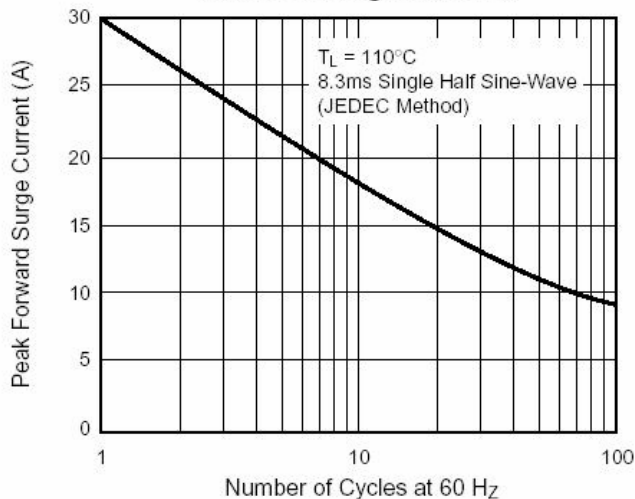
- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area¹

RATINGS AND CHARACTERISTIC CURVES GE1A THRU GE1J

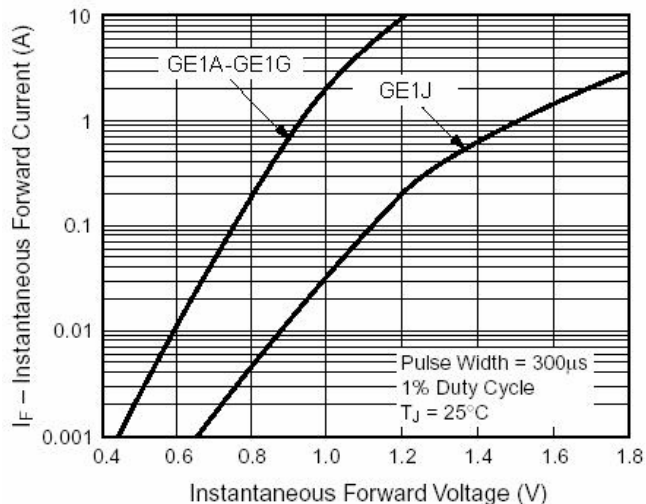
Forward Current Derating Curve



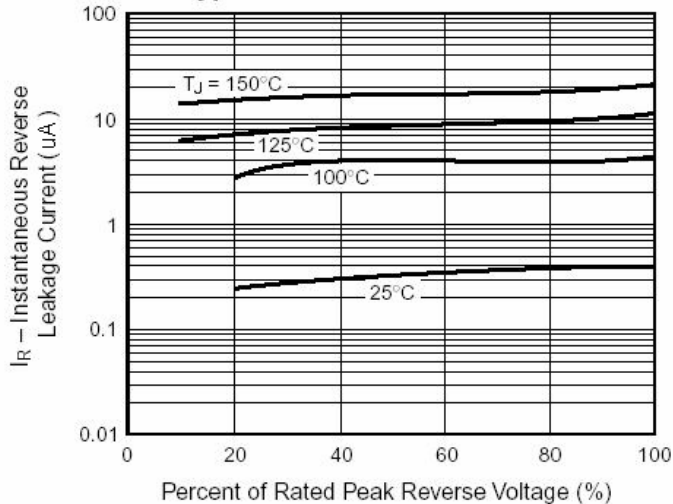
Maximum Non-Repetitive Peak Forward Surge Current



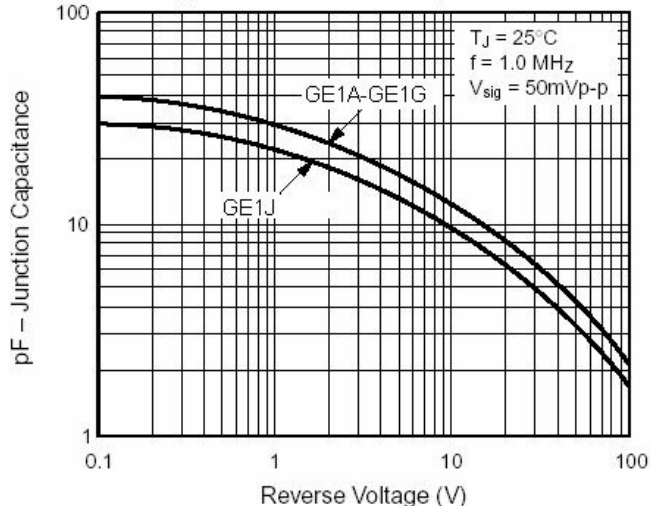
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Typical Transient Thermal Impedance

