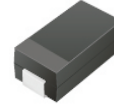


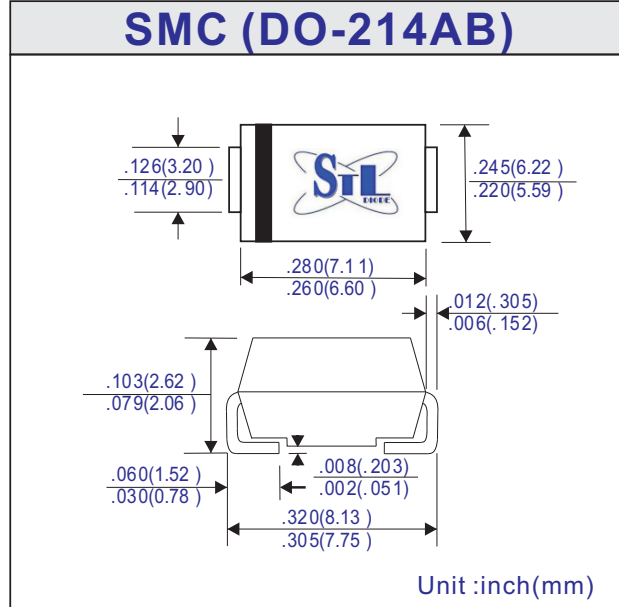


**3.0A SMD Sintered Glass Passivated Junction
 Fast Recovery Rectifiers - 50V to 1000V**



FEATURES
<ul style="list-style-type: none"> • High temperature metallurgically bonded construction • Sintered glass cavity free junction • Ideal for surface mount automotive applications • For use in high frequency rectifier circuits • Fast switching for high efficiency • High temperature soldering 450°C/5 sec at terminals • Lead-free parts for green partner, meet environmental standards of MIL-S-19500

MECHANICAL DATA
<ul style="list-style-type: none"> • Case: Molded plastic SMC/DO-214AB • Epoxy: UL94-V0 rated flame retardant • Terminals: Solderable per MIL-STD-750 Method 2026 • Polarity: Color band denotes cathode end • Mounting Position: Any • Weight: 0.007 ounces, 0.25 grams



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS
 Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	RGF 30A	RGF 30B	RGF 30D	RGF 30G	RGF 30J	RGF 30K	RGF 30M	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T _L =120°C	IF(AV)	3.0							A
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	115.0							A
Maximum Instantaneous Forward Voltage at 3.0A	VF	1.3							Volts
Maximum Full Load Reverse Current Full Cycle Average TA=55°C	IR(AV)	50.0							µA
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0 100.0							µA
Typical Reverse Recovery Time (Note 1)	Trr	150			250		500		nS
Typical Junction Capacitance (Note 2)	CJ	60.0							pF
Typical Thermal Resistance (Note 3)	RθJA RθJL	50,0 15,0							°C/W
Operating Junction & Storage Temperature Range	TJ, TSTG	-65 ~ +175							°C

Note 1. Reverse recovery time test conditions: IF=0.5A, IR=1.0A, IRR=0.25A
 2. Measure at 1.0MHz and applied reverse voltage of 4.0Volts.
 3. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2" (5.0x5.0mm) copper pad areas.

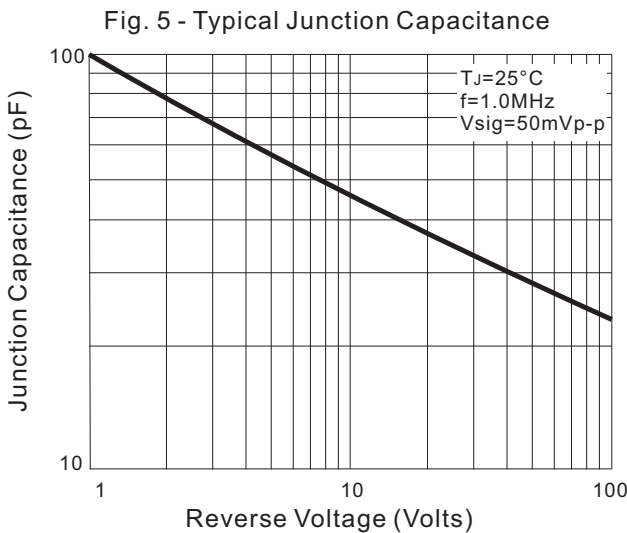
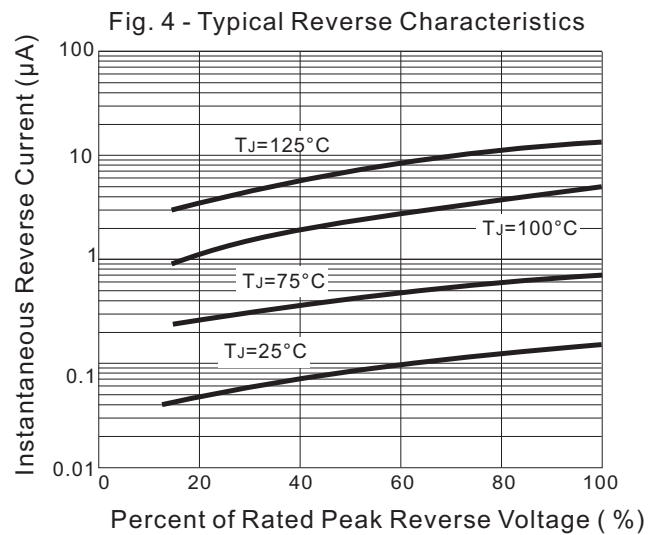
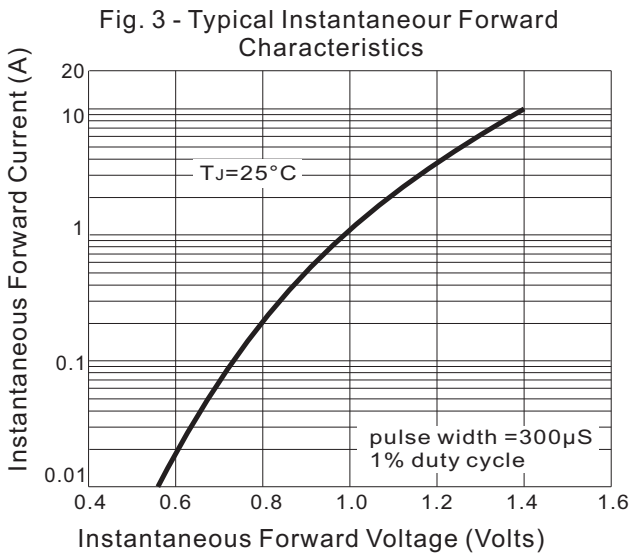
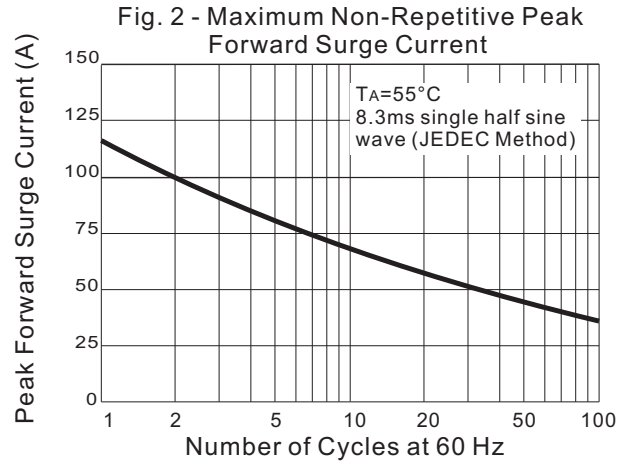
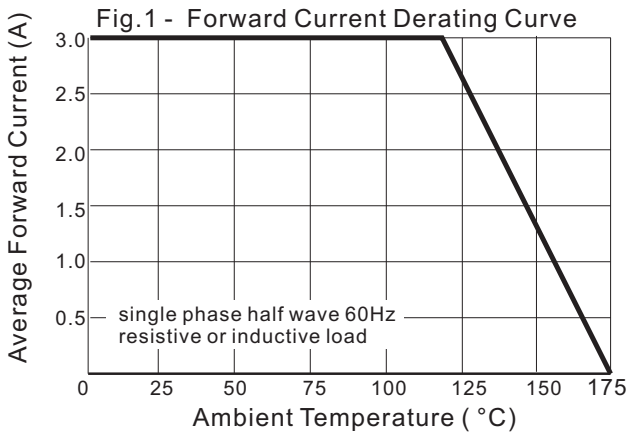
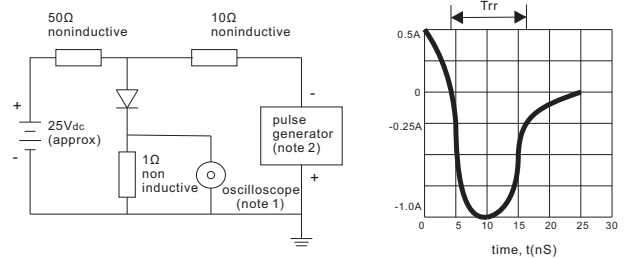


Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic



Note: 1. rise time=7nS Max. input impedance=1MHz 22pF
 2. rise time=10nS Max. source impedance=80Ω