Surface Mount Fast Recovery
Glass Passivated Rectifier

Features:

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

Mechanical Data:

Case	: Molded Plastic
Polarity	: Colour band denotes cathode
Weight	: 0.007 ounces, 0.21 grams
Mounting Position	: Any
Reverse Voltage	: 100 to 1000 Volts
Forward Current	: 3 Amperes

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	RS3B+	RS3G+	RS3M+	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	100	400	1000	V
Max. RMS Voltage	V_{RMS}	70	280	700	
Max. DC Blocking Voltage	V_{DC}	100	400	1000	
Max. Average Forward Rectified Current T_A= 50°C	$I_{(AV)}$	3			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100			
Peak Forward Voltage at 3A DC	V_F	1.3			V
Max. DC Reverse Current at T_A = 25°C Rated DC Blocking Voltage at T_A = 100°C	I_R	5 100			μA
Max. Reverse Recovery Time (Note 1)	T_{rr}	150		500	nS
Typical Junction Capacitance (Note 2)	C_J	65		40	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	15			°C/W
Operating Temperature Range	T_J	-55 to +150			°C
Storage Temperature Range	T_{STG}				

Notes:

1. Measured with I_F = 0.5A, I_R = 1A, I_{RR} = 0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient.
4. The typical data above is for reference only

Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

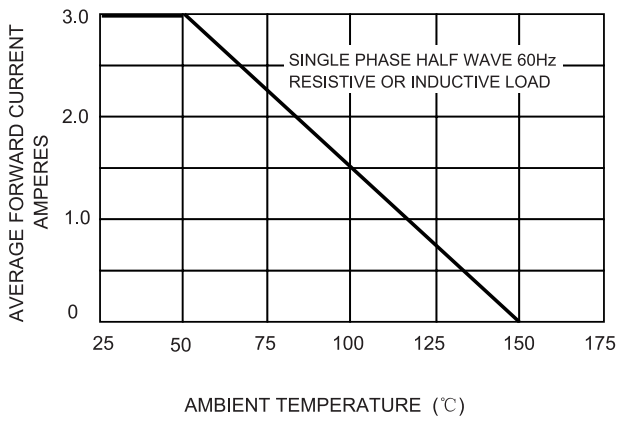


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

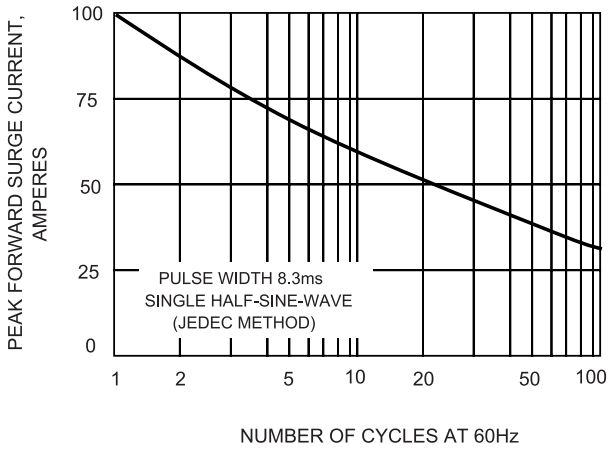


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

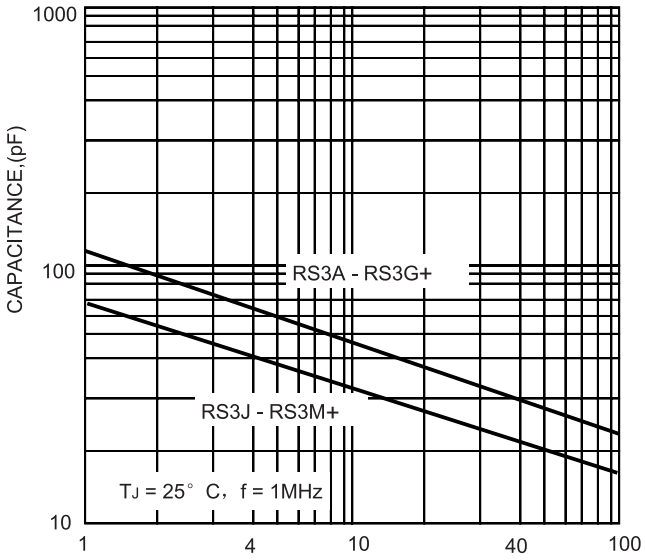
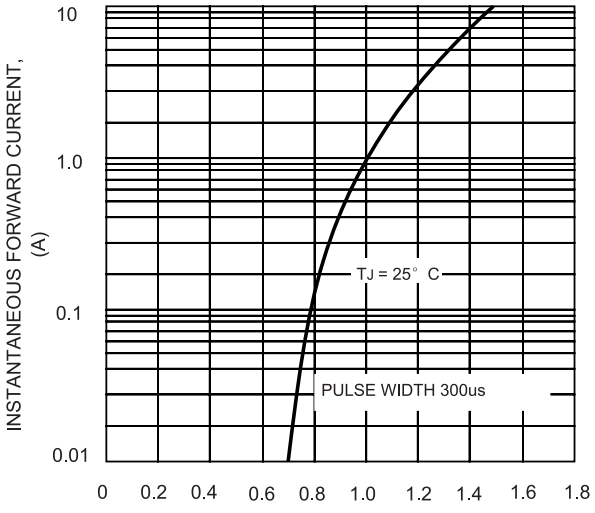
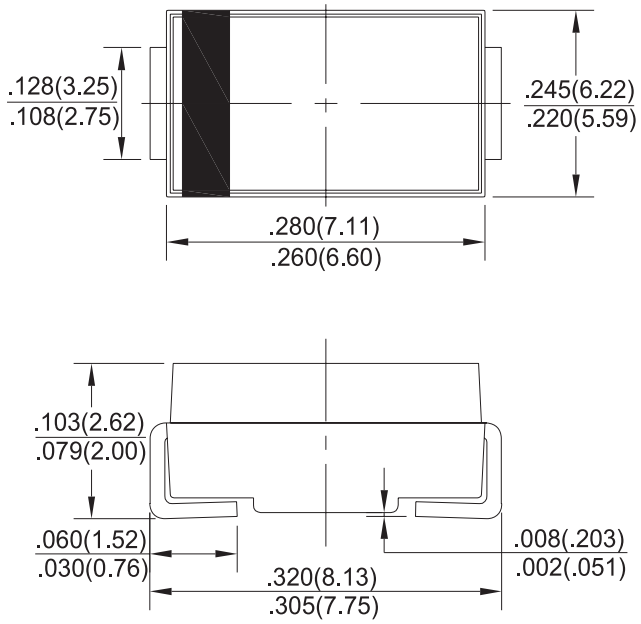


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Dimensions:

SMC



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Fast Recovery Glass Passivated Rectifiers	RS3B+
	RS3G+
	RS3M+