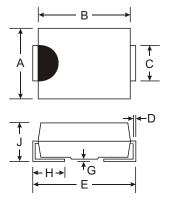


RS3A/B - RS3M/B

3.0A SURFACE MOUNT FAST RECOVERY RECTIFIER

Features

- Glass Passivated Die Construction
- Fast Recovery Time for High Efficiency
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 100A Peak
- Ideally Suited for Automatic Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0



	SI	/IB	SMC					
Dim	Min	Max	Min	Max				
Α	3.30	3.94	5.59	6.22				
В	4.06	4.57	6.60	7.11				
С	1.96	2.21	2.75	3.18				
D	0.15	0.31	0.15	0.31				
E	5.00	5.59	7.75	8.13				
G	0.10	0.20	0.10	0.20				
Н	0.76	1.52	0.76	1.52				
J	2.00	2.62	2.00	2.62				
All Dimensions in mm								

Mechanical Data

Case: Molded Plastic

Terminals: Solder Plated Terminal -Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band or Cathode Notch

Marking: Type Number

SMB Weight: 0.09 grams (approx.)

SMC Weight: 0.20 grams (approx.)

AB, BB, DB, GB, JB, KB, MB Suffix Designates SMB Package A, B, D, G, J, K, M Suffix Designates SMC Package

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	RS3 A/AB	RS3 B/BB	RS3 D/DB	RS3 G/GB	RS3 J/JB	RS3 K/KB	RS3 M/MB	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T _T = 75°C		Io	3.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	100						А	
Forward Voltage @ I _F = 3.0A		V_{FM}	1.3						V	
Peak Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ TA = 125°C		I _{RM}	5.0 250						μА	
Maximum Recovery Time (Note 3)		t _{rr}	150 250 500				00	ns		
Typical Junction Capacitance (Note 2)		Cj	50							pF
Typical Thermal Resistance Junction to Terminal (Note 1)		$R_{\theta JT}$	25						K/W	
Operating and Storage Temperature Range		T _{j,} T _{STG}	-65 to +150						°C	

1. Thermal resistance: junction to terminal, unit mounted on PC board with 5.0 mm2 (0.013 mm thick) copper pad as heat sink. Notes:

- 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 3. Reverse recovery test conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$. See figure 5.



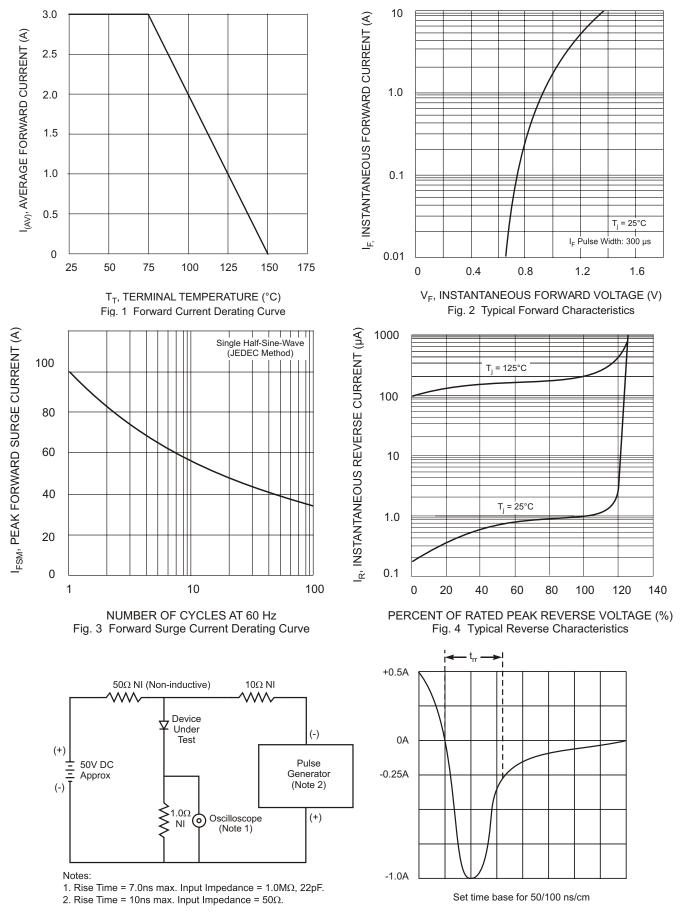


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit