



RS3AH THRU RS3MH

SURFACE MOUNT FAST RECOVERY RECTIFIERS

REVERSE VOLTAGE: 50 to 1000 VOLTS

FORWARD CURRENT: 3.0 AMPERE

FEATURES

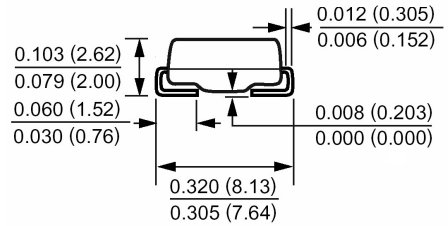
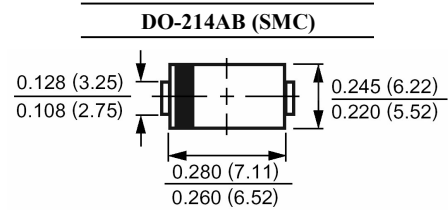
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Easy pick and place
- Built-in strain relief
- Fast Recovery times for high efficiency
- Suffix "H" indicates Halogen-free parts, ex. RS3AH

MECHANICAL DATA

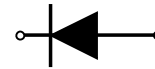
Case : Molded plastic, DO-214AB (SMC)

Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

Polarity : Color band denotes cathode end



Dimensions in inches and (millimeters)



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbols	RS3AH	RS3BH	RS3DH	RS3GH	RS3JH	RS3KH	RS3MH	Units
		RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	3.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100							Amp
Maximum Forward Voltage at 3.0A	V_F	1.3							Volts
Maximum Reverse Current at $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	I_R	10 300							mAmp
Maximum Reverse Recovery Time (Note 1)	t_{rr}	150			250		500		ns
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60.0							°C/W
Operating Junction Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{stg}	-55 to +150							°C

NOTES:

1- Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.

2- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16mm x 16mm) copper pad areas.



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RATINGS AND CHARACTERISTIC CURVES

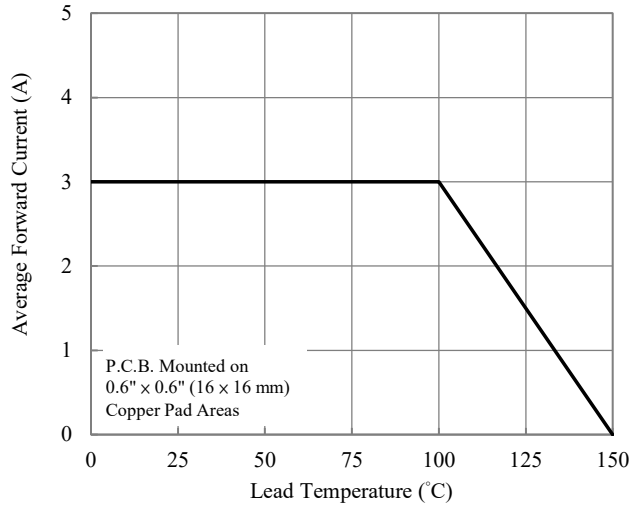


Fig.1-Forward Current Derating Curve

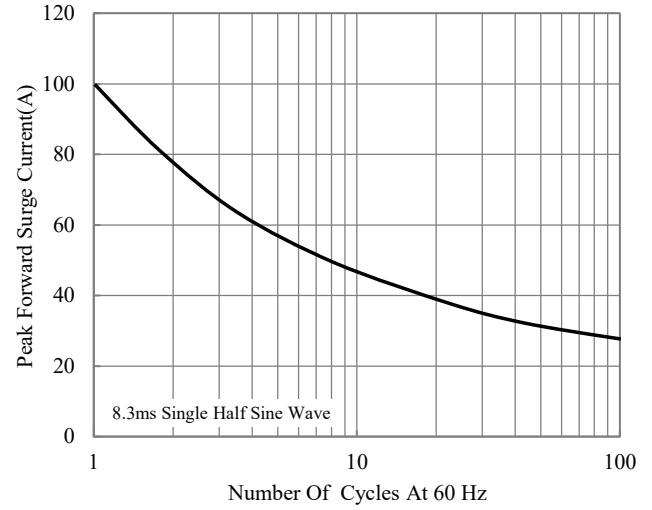


Fig.2-Maximum Non-Repetitive Peak Forward Surge Current

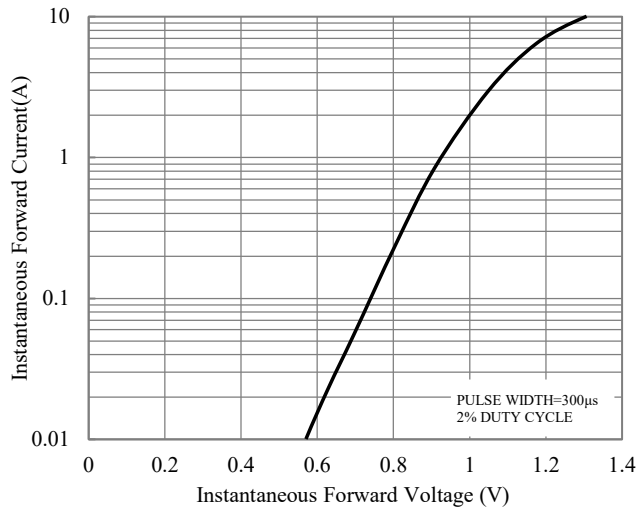


Fig.3-Typical Forward Voltage Characteristics

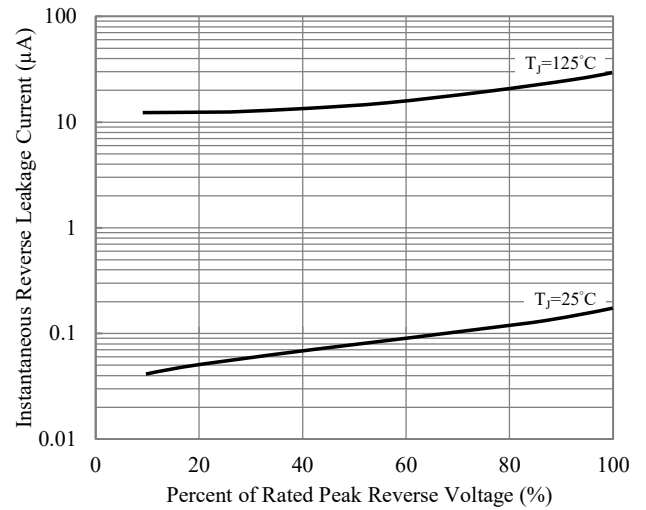


Fig.4-Typical Reverse Leakage Characteristics