RS3AB THRU RS3MB

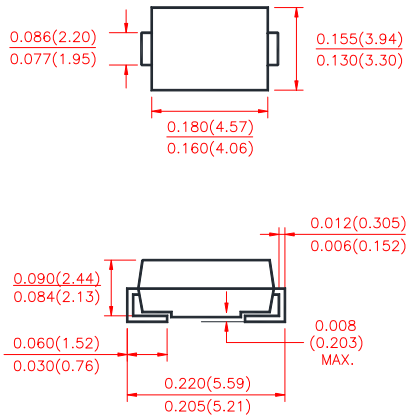
SURFACE MOUNT FAST SWITCHING RECTIFIER

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **3.0 Ampere**

FEATURES

- Plastic package has underwrites laboratory flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Fast switching for high efficiency
- Glass passivated chip junction
- High temperature soldering 250℃/10 second at terminals

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDED DO-214AA molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ ambient temperature unless otherwise specified

MAXIMUM RATINGS & THERMAL CHARACTERISTICS

	SYMBOLS	RS 3AB	RS 3BB	RS 3DB	RS 3GB	RS 3JB	RS 3KB	RS 3MB	UNIT
Maximum Repetitive 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 T_L=90℃	$I_{F(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) T_L=90℃	I_{FSM}	100							Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	55							℃/W
	$R_{\theta JL}$	18							
Operating junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							℃

ELECTRICAL CHARACTERISTICS

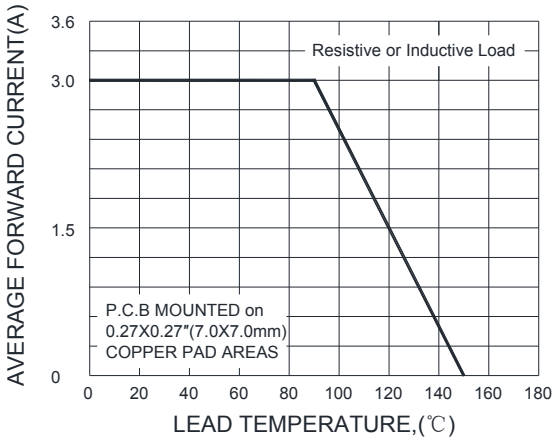
		SYMBOLS	RS 3AB	RS 3BB	RS 3DB	RS 3GB	RS 3JB	RS 3KB	RS 3MB	UNIT
Maximum Instantaneous Forward Voltage at 3.0A		V_F	1.30							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T_A = 25℃	I_R	5.0							μA
	T_A = 125℃		50							
Typical Reverse Recovery Time at I_F=0.5A, I_R=1.0A, I_{RR}=0.25A		t_{rr}	150				250	500		ns

Notes:

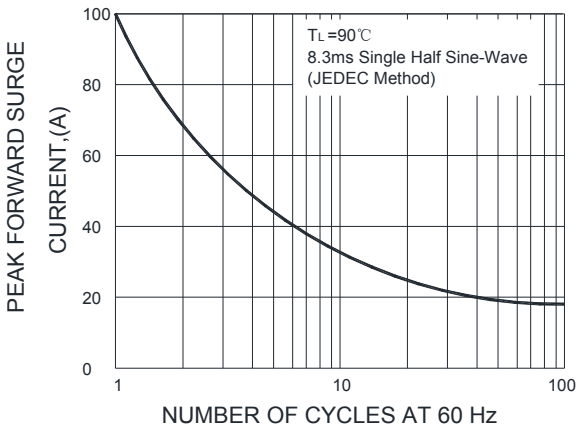
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.27×0.27″ (7.0 × 7.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

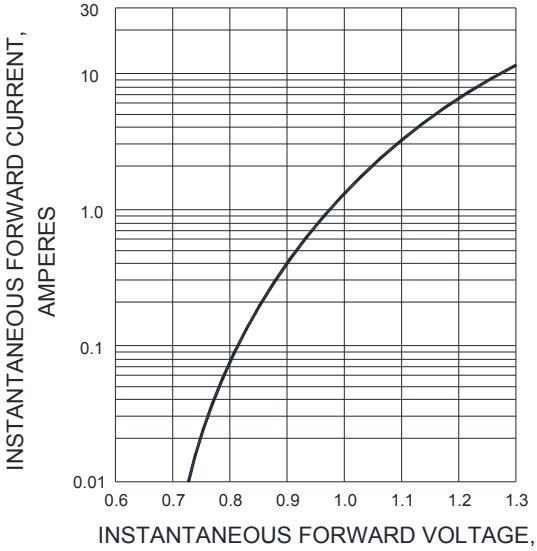
F1G.1-FORWARD CURRENT DERATING CURVE



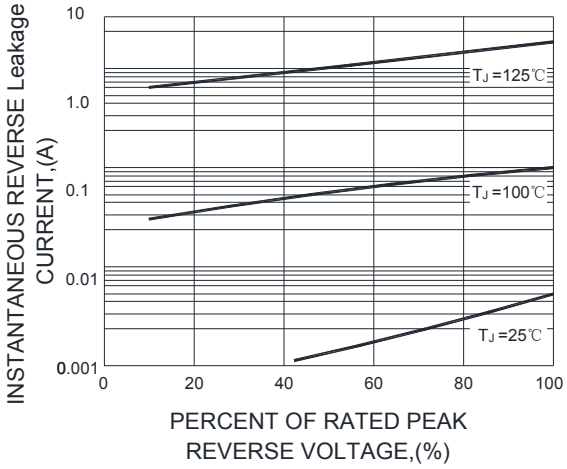
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



SYMBOLS	RS3AB	RS3BB	RS3DB	RS3GB	RS3JB	RS3KB	RS3MB
MARKING	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M