



RS5A THRU RS5M

FAST RECOVERY RECTIFIER

Reverse Voltage: 50 to 1000 Volts

Forward Current:5.0Amperes

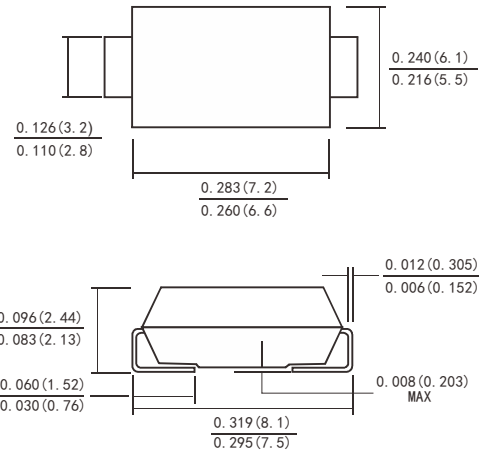
FEATURES

- Glass passivated cavity-free junction
- Ideal for surface mount automotive applications
- Ultrafast recovery time for high efficiency
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability
- Classification 94V-0
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC
- High temperature soldering guaranteed:260°C/10 seconds at terminals

MECHANICAL DATA

- **Case:** JEDEC SMC(DO-214AB) molded plastic body
- **TerMINals:** solder plated ,solderable per MIL-STD-750,method 2026
- **Polarity:** color band denotes cathode end
- **Mounting Position:** Any
- **Weight:** 0.007ounce,0.2 gram

SMC(DO-214AB)



Dimensions in inches and (millimeters)

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%.)

		Symbols	RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M	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 0.375"(9.5mm)lead length at TA=55°C		I(AV)	5.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	200							Amps
Maximum Instantaneous Forward Voltage at 5.0A		VF	1.3							Volts
Maximum DC Reverse Current at rated DC blocking voltage	TA=25°C	IR	5.0							μA
	TA=100°C		200							
Maximum reverse recovery time(Note1)		trr	150				250	500		ns
Typical junction capacitance(Note2)		CJ	100							pF
Operating junction and storage temperature range		TJ TSTG	-65 to+150							°C

Note: 1. Test conditions: IF=0.5A,IR=1.0A,IRR=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0 Volts D.C.

Rating and Characteristic Curves (TA = 25°C Unless otherwise noted) RS5A THRU RS5M

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

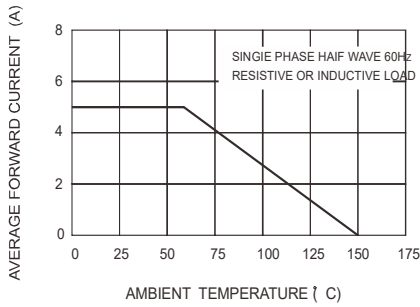


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

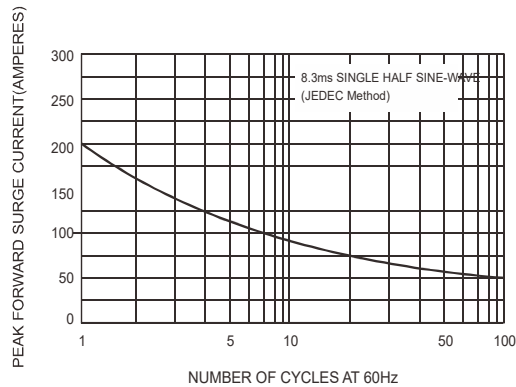


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

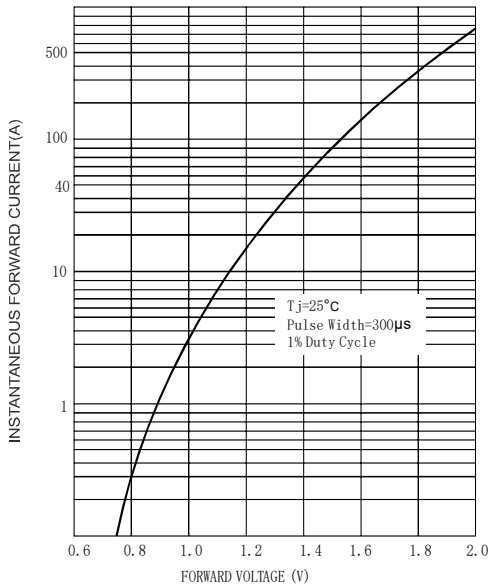


FIG.4-TYPICAL JUNCTION CAPACITANCE

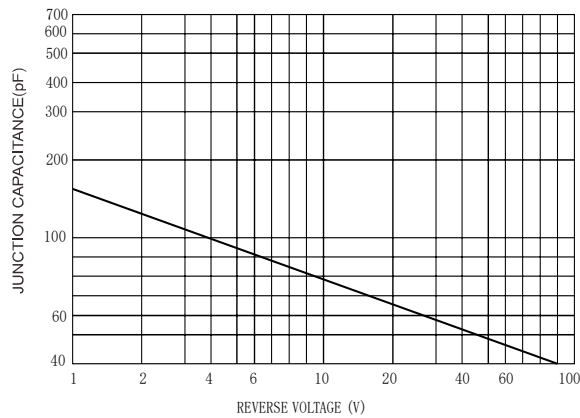
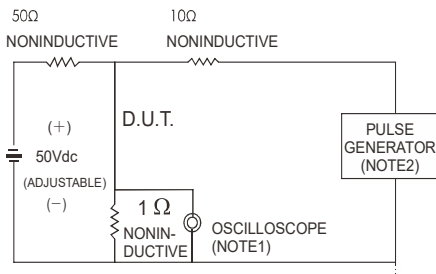


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:1.Rise Time=7ns max. input Impedance=1 megohm 22pF
2.Rise Time=10ns max. source Impedance=50 ohms

