

Dimensions in inches and (millimeters)

Marking Diagram



RS2X = Specific Device Code
 G = Green Compound
 Y = Year
 M = Work Month

Features

- For surface mounted application
- Glass passivated junction chip
- Built-in strain relief, ideal for automated placement
- Plastic material used carries Underwriters Laboratory Classification 94V-0
- Fast switching for high efficiency
- High temperature soldering: 260 °C / 10 seconds at terminals
- Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- Cases: Molded plastic
- Terminals: Pure tin plated, Lead free.
- Polarity: Indicated by cathode band
- Packing: 12mm tape per EIA STD RS-481
- Weight: 0.093 gram

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	RS 2A	RS 2B	RS 2D	RS 2G	RS 2J	RS 2K	RS 2M	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current See Fig. 1 @ T _L =100°C	I(AV)	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	50							A
Maximum Instantaneous Forward Voltage @ 2.0A	VF	1.3							V
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =125 °C	IR	5							uA
		200							uA
Maximum Reverse Recovery Time (Note 1)	Trr	150				250	500		nS
Typical Junction Capacitance (Note 2)	Cj	50							pF
Typical Thermal Resistance (Note 3)	RθJA RθJL					55 18			°C /W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

- Notes:
- Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
 - Measured at 1 MHz and Applied V_R=4.0 Volts
 - Thermal Resistance from Junction to Ambient and Junction to Lead Mounted on P.C.B. with 0.4" x 0.4" (10mm x 10 mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (RS2A THRU RS2M)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

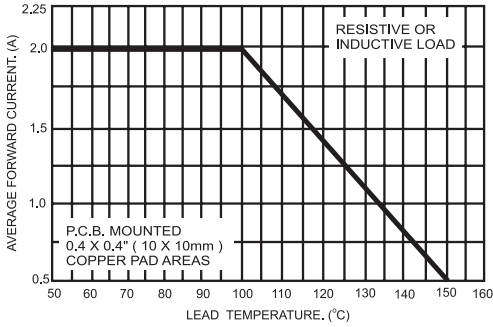


FIG.2- TYPICAL REVERSE CHARACTERISTICS

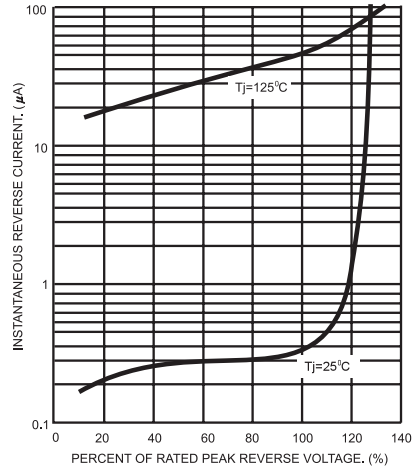


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

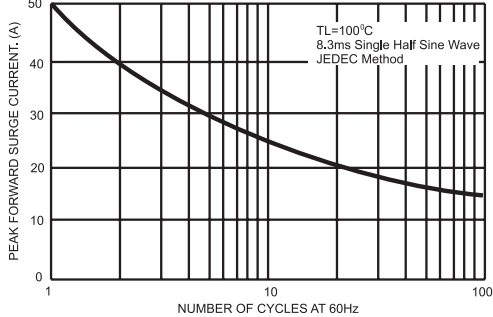


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

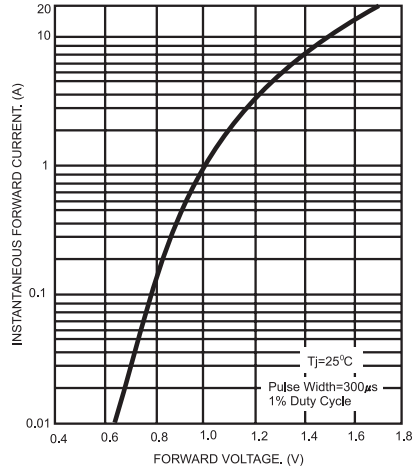


FIG.4- TYPICAL JUNCTION CAPACITANCE

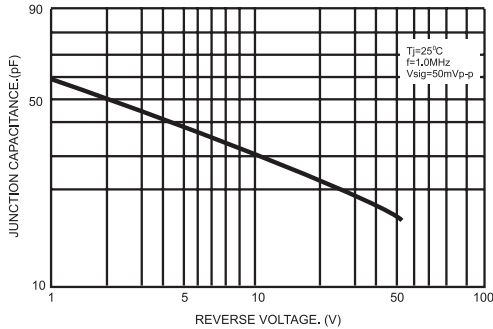
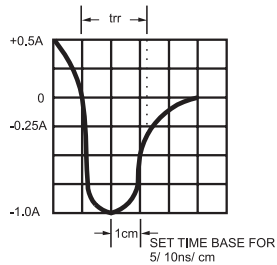
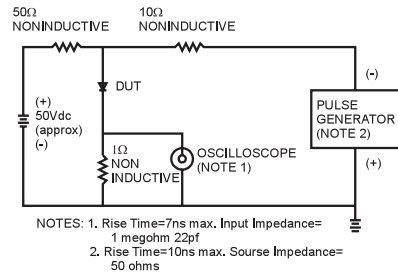


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Source Impedance= 50 ohms