



Certificate Number: Q10561

Certificate Number: E17276

GR2A - GR2M

GLASS PASSIVATED JUNCTION FAST RECOVERY RECTIFIERS

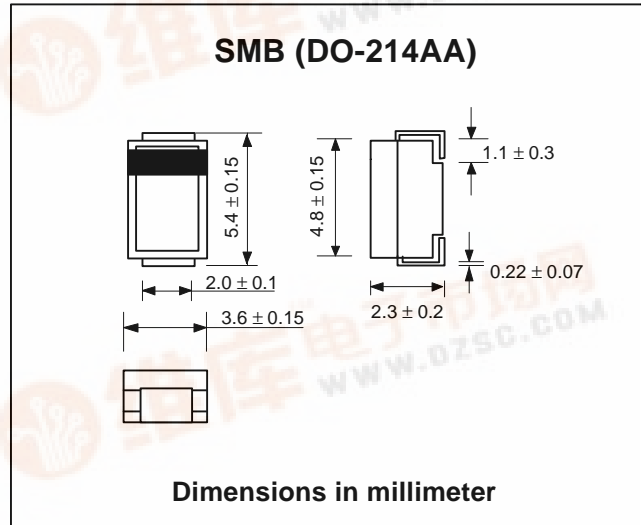
PRV : 50 - 1000 Volts
Io : 2.0 Amperes

FEATURES :

- * Glass passivated chip
- * High current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency

MECHANICAL DATA :

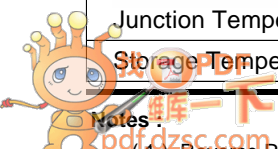
- * Case : SMB Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.1079 gram



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%.

RATING	SYMBOL	GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M	UNIT
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 Current Ta = 75 °C	IF(AV)				2.0				A
Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	IFSM				75				A
Maximum Peak Forward Voltage at IF = 2.0 A	VF				1.3				V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	IR				10				µA
	IR(H)				500				µA
Maximum Reverse Recovery Time (Note 1)	Trr	150			250	500			ns
Typical Junction Capacitance (Note 2)	CJ				15				pf
Junction Temperature Range	TJ				- 65 to + 150				°C
Storage Temperature Range	TSTG				- 65 to + 150				°C

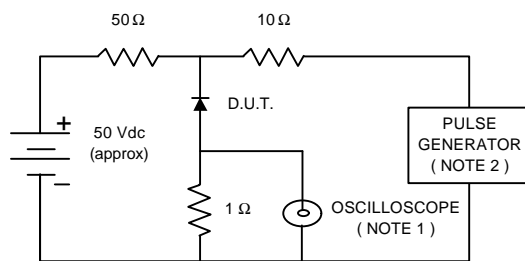


(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 1.0 V.

RATING AND CHARACTERISTIC CURVES (GR2A - GR2M)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.
 3. All Resistors = Non-inductive Types.

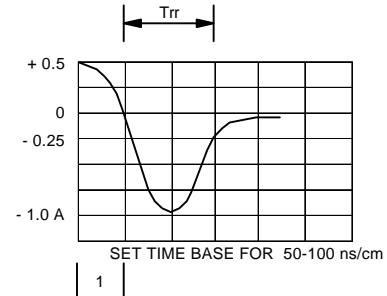


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

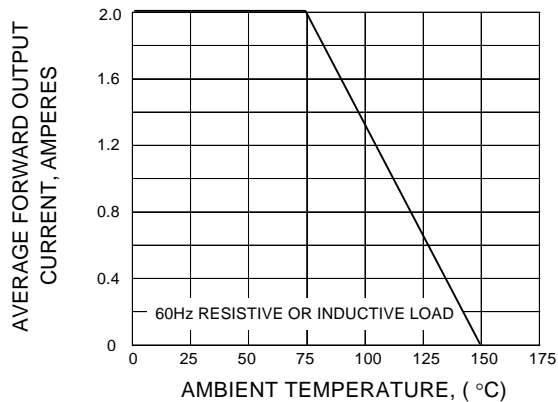


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

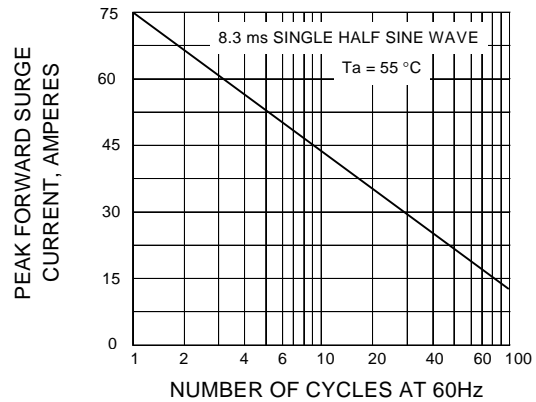


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

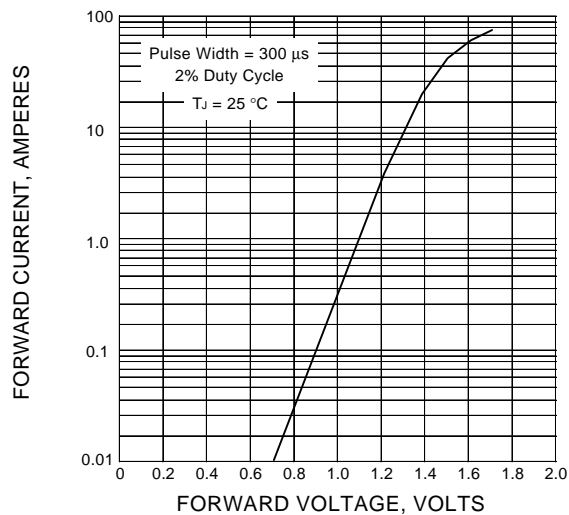


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

