



YEA SHIN TECHNOLOGY CO., LTD

ER2A-A THRU ER2J-A

SURFACE MOUNT SUPER FAST RECTIFIER

VOLTAGE - 50 to 600 Volts CURRENT - 2.0 Ampere



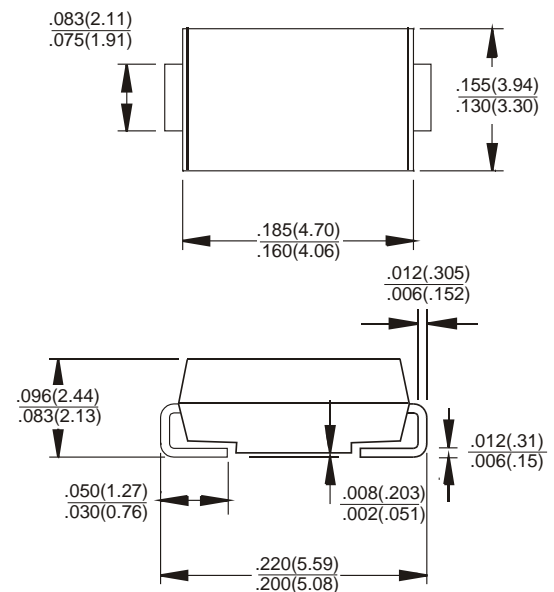
FEATURES

- For surface mounted applications
- Low profile package
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request
- AEC- Q101 qualified

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band

SMB/DO-214AA Unit:inch(mm)



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%.

	SYMBOLS	ER2A	ER2B	ER2C	ER2D	ER2E	ER2G	ER2J	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	V
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current , at TL=100 °C	I(AV)	2.0							A
Peak Forward Surge Current 8.3ms single half sinewave superi mposed on rated load(JEDEC method)	IFSM	50.0							A
Maximum Instantaneous Forward Voltage at 2.0A	VF	0.95				1.25		1.7	V
Maximum DC Reverse Current TJ=25 °C	IR	5.0							uA
At Rated DC Blocking Voltage TJ=100 °C		100							
Maximum Reverse Recovery Time (Note 1)	TRR	35.0							nS
Typical Junction capacitance (Note 2)	CJ	25.0							pF
Typical Thermal Resistance (Note 3)	RθJA	20.0							°C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150							°C

NOTES:

1. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, Irr=0.25A
2. Measured at 1 MHz and Applied reverse voltage of 4.0 volts
3. 8.0mm² (.013mm thick) land areas

DEVICE CHARACTERISTICS

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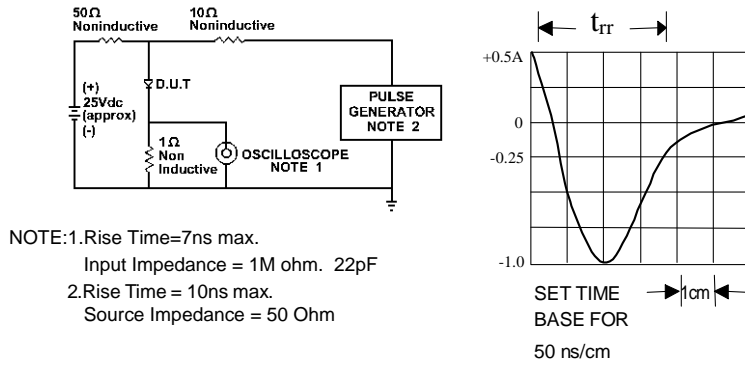


Fig. 1-REVERSERE COVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

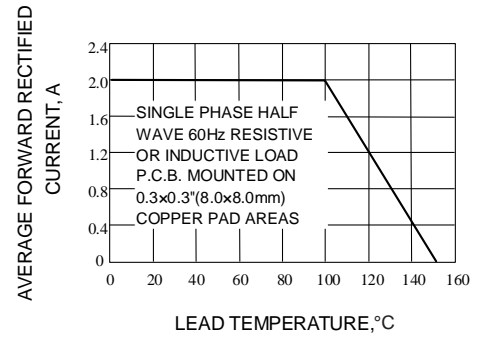


Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

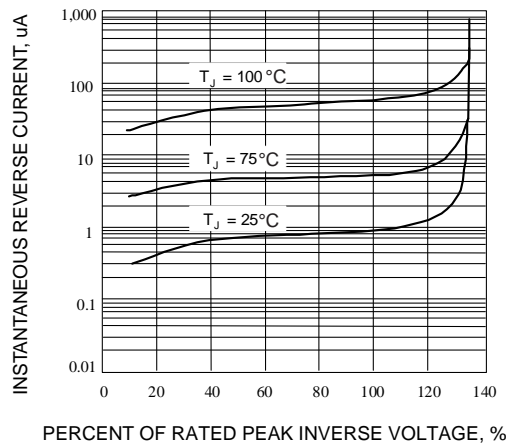


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

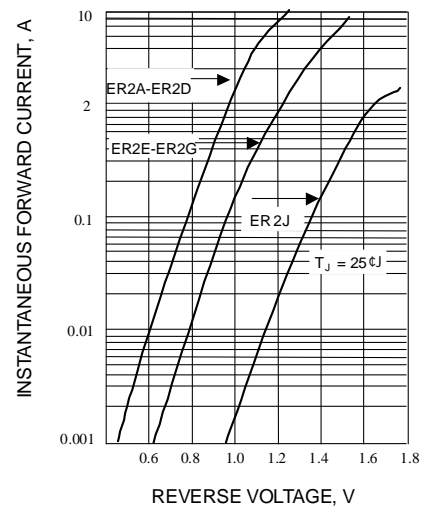


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

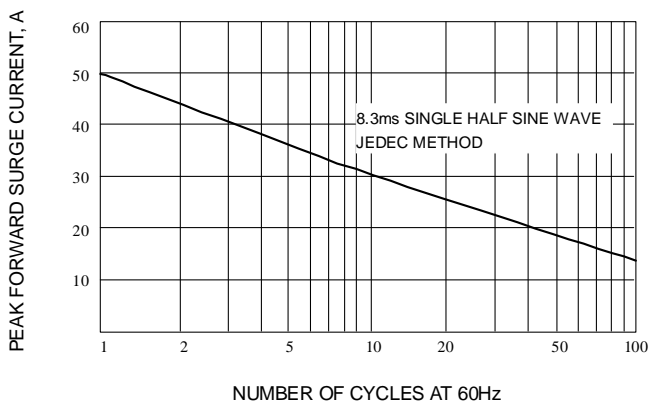


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

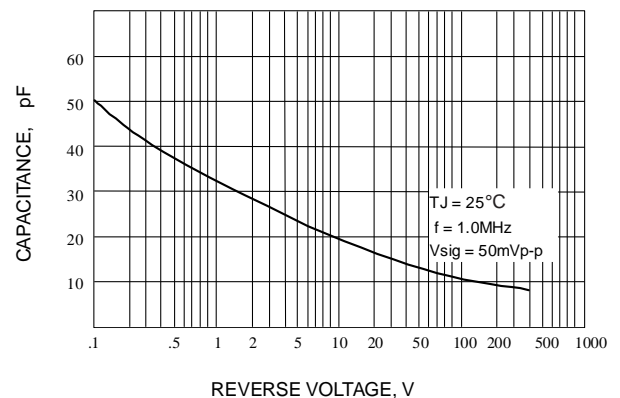


Fig. 6-TYPICAL JUNCTION CAPACITANCE