Super Fast Recovery Rectifiers

ER2A THRU ER2J 50 to 600 V 2.0 A

Central Plate Electronics Co., Ltd.

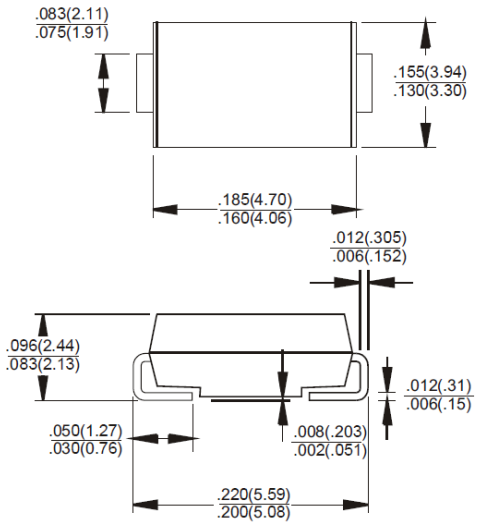
FEATURES

- Glass passivated chip junction
- Ideal for automated placement
- Ultrafast reverse recovery time for high efficiency
- Low profile package
- High forward surage capability
- High temperatrue soldering：
  260℃/10 seconds at terminals
- Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC

MECHANICAL DATA

- Case: JEDEC DO-214AAmolded plastic body over passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end
- Weight: 0.0032 ounce, 0.093 gram

SMB/DO-214AA



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	ER2A	ER2B	ER2D	ER2G	ER2J	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	Volts
Average Forward Rectified Current @ T_L = 110℃	$I_{(AV)}$	2.0					Amp
Peak Forward Surge Current,8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50					Amp
Maximum Forward Voltage at 2.0A DC	V_F	0.95			1.25	1.7	Volts
Maximum Reverse Current @ Rated T_J =25 ℃ Reverse Voltage @ T_J =100℃	I_R	1.0 150					uAmp
Typical Thermal Resistance T_J =25℃(Note3)	$R_{\theta}JA$	20					℃/W
Typical Junction capacitance (Note2)	C_J	18					pF
Maximum Reverse Recovery Time (Note1)	TRR	35					uS
Operating Temperature Range	T_J	-55 to +150					℃
Storage Temperature Range	T_{STG}	-55 to +150					℃

NOTES:

1. Measured with I_F =0.5A,I_R =1A,I_{RR} =0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. 8.0 mm^2 (0.013mm thick) land areas.

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FIG.1 MAXIMUM AVERAGE FORWARD CURRENT RATING

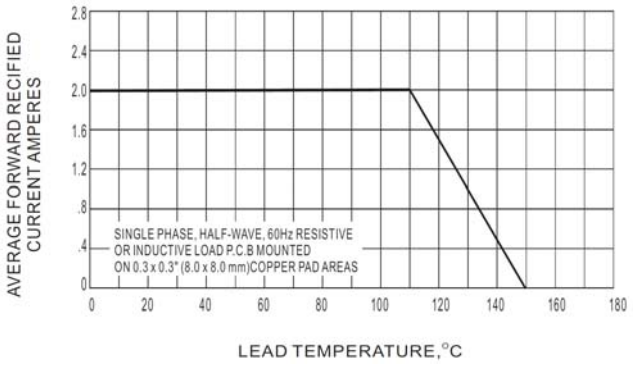

FIG.2 TYPICAL JUNCTION CAPACITANCE

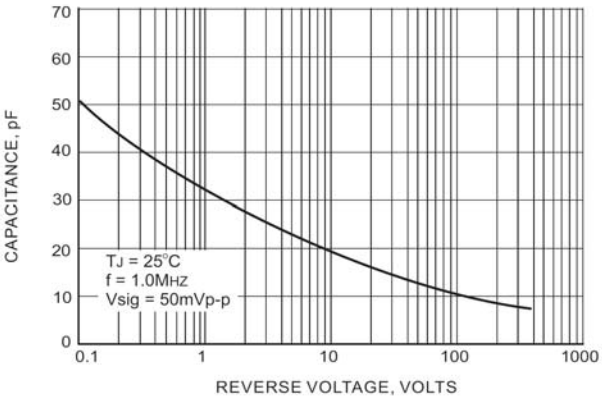

FIG.3 TYPICAL REVERSE CHARACTERISTICS

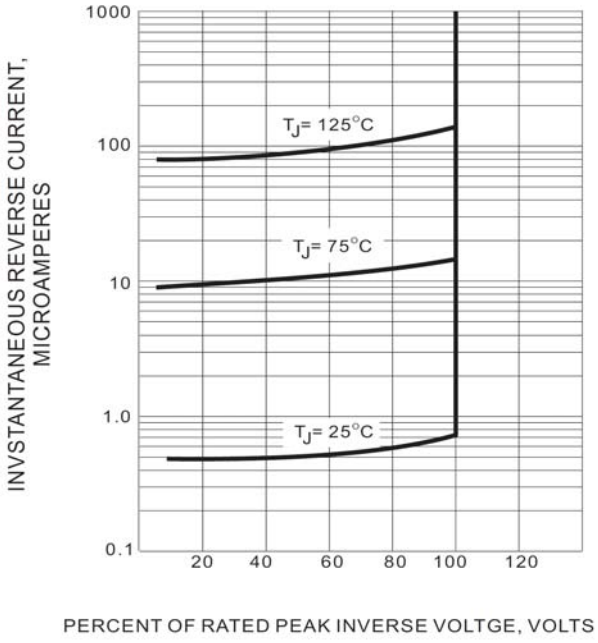

FIG.4 TYPICAL FORWARD CHARACTERISTICS

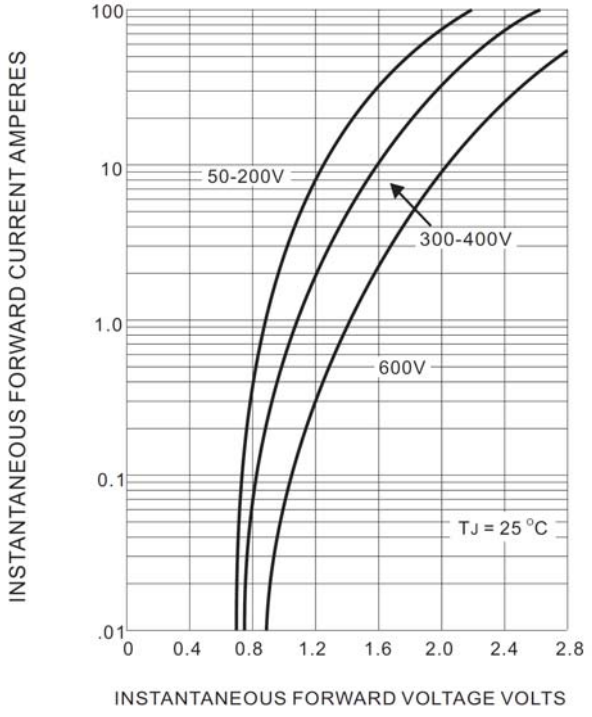

FIG.5 MAXIMUM NON-REPEITIVE SURGE CURRENT