



DATA SHEET

ER2A~ER2J

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 600 Volts **CURRENT** 2.0 Amperes

SMB/DO-214AA

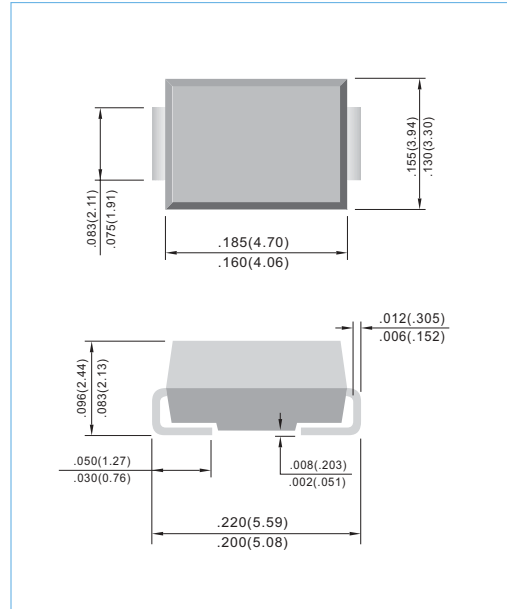
Unit: inch (mm)

FEATURES

- For surface mounted applications
- High temperature metallurgically bonded-no compression contacts as found in other diode-constructed rectifiers
- Glass passivated junction
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic
 Terminals: Solder plated, solderable per MIL-STD-202G, Method 208
 Polarity: Indicated by cathode band
 Standard packaging: 16mm tape (EIA-481)
 Weight: 0.003 ounce, 0.093 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

PARAMETER	SYMBOL	ER2A	ER2B	ER2C	ER2D	ER2E	ER2G	ER2J	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Current 375" (9.5mm) lead length at T _L =110°C	I _F	2.0							A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50							A
Maximum Forward Voltage at 2.0A	V _F	0.95			1.25		1.7		V
Maximum DC Reverse Current T _A =25 °C at Rated DC Blocking Voltage T _A =100 °C	I _R	5.0			150		uA		
Maximum Reverse Recovery Time (Note 1)	T _{RR}	35			ns				
Typical Junction capacitance (Note 2)	C _J	25			pF				
Maximum thermal Resistance (Note 3)	R _{θJL}	20			°C / W				
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 TO +150							°C

NOTES: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
 2. Measured at 1 MHz and applied V_r = 4.0 volts.
 3. 8.0 mm² (.013mm thick) land areas.



RATING AND CHARACTERISTIC CURVES

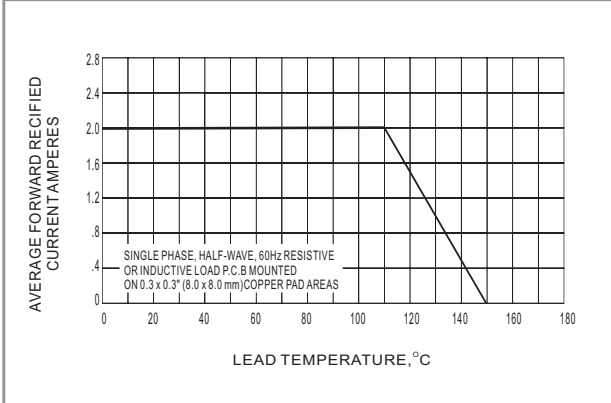


FIG.1 MAXIMUM AVERAGE FORWARD CURRENT RATING

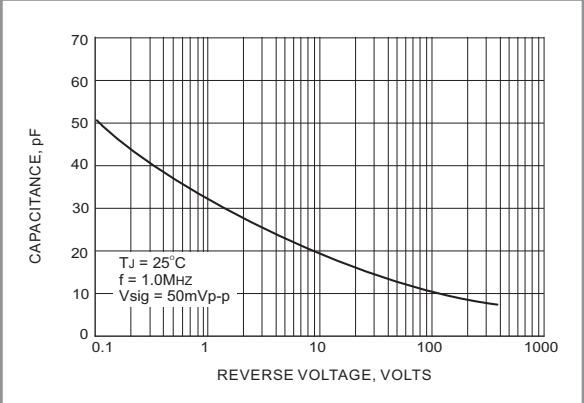


FIG.2 TYPICAL JUNCTION CAPACITANCE

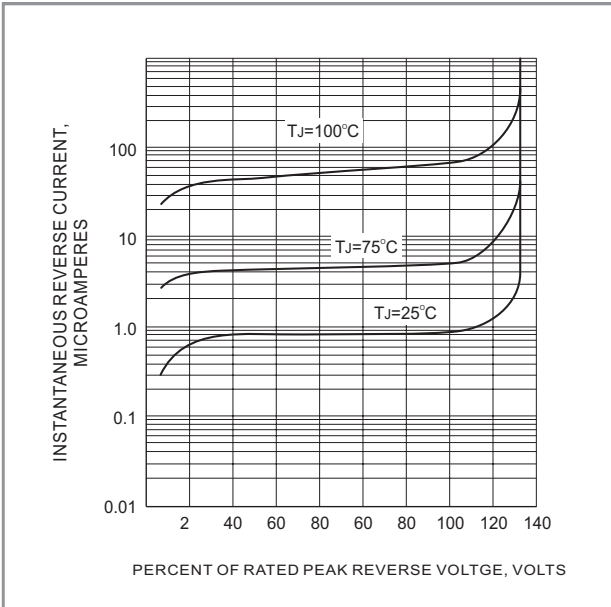


FIG.3 TYPICAL REVERSE CHARACTERISTICS

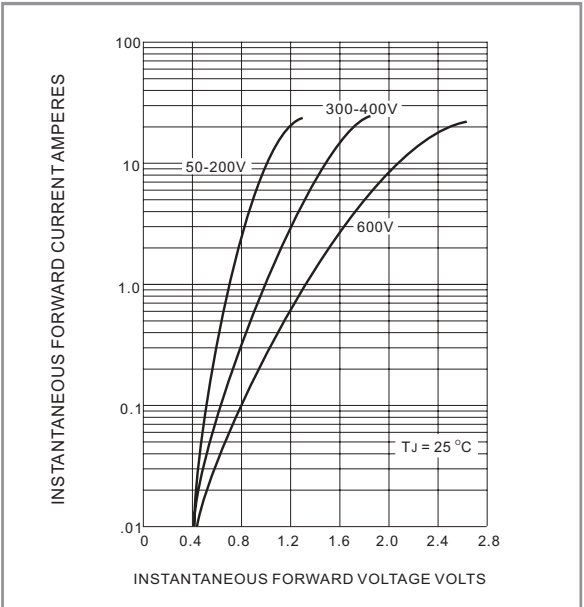


FIG.4 TYPICAL FORWARD CHARACTERISTICS

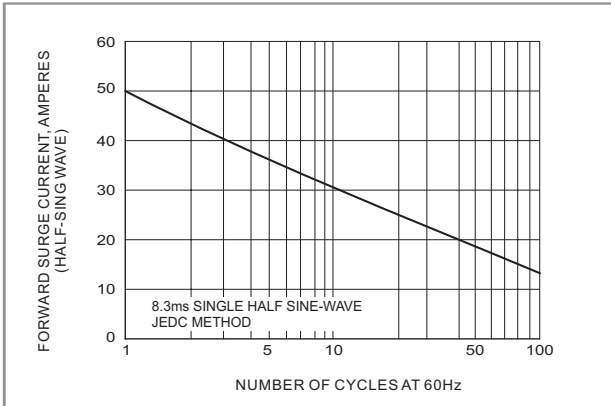


FIG.5 MAXIMUM NON-REPEITIVE SURGE CURRENT