

ER3AB~ER3MB

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 3 Ampere

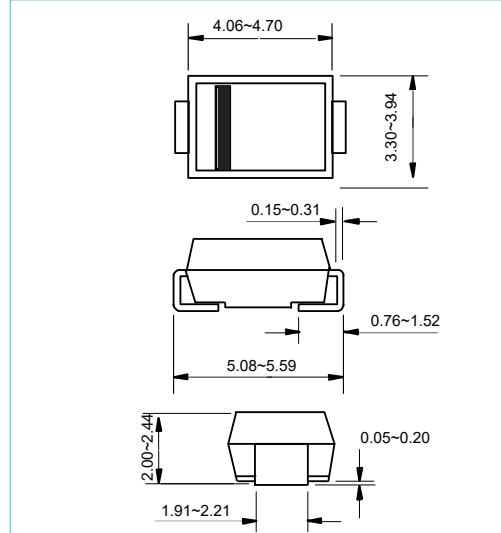
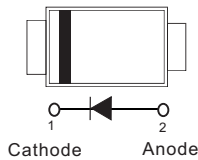
SMB / DO-214AA Unit:mm

FEATURES

- Superfast Recovery Times For High Efficiency
- Glass Passivated Junction
- Easy Pick And Place
- Moisture Sensitivity Level 1
- Lead free in compliance with EU RoHS 2.0

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	ER3AB	ER3BB	ER3DB	ER3GB	ER3JB	ER3KB	ER3MB	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Current (see FIG.1)	$I_{F(AV)}$	3							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100							A	
Maximum Forward Voltage at 3 A	V_F	0.95		1.25		1.70			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=100^{\circ}C$	I_R	5.0 200							uA	
Maximum Reverse Recovery Time(Note 1)	t_{rr}	35					75			ns
Thermal Resistance	$R_{\theta JL}$	20							°C / W	
Typical Junction Capacitance (Note2)	C_J	45							pF	
Operating Junction Temperature Range	T_J	-55 to + 150							°C	
Storage Temperature Range	T_{STG}	-55 to + 150							°C	

NOTES:

1. Reverse Recovery Test Conditions: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volt

ER3AB~ER3MB

RATING AND CHARACTERISTIC CURVES

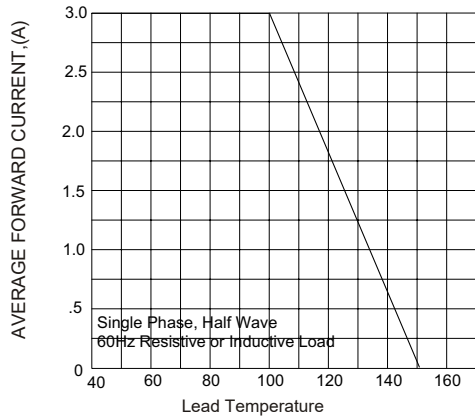


Fig. 1 Forward Current Derating Curve

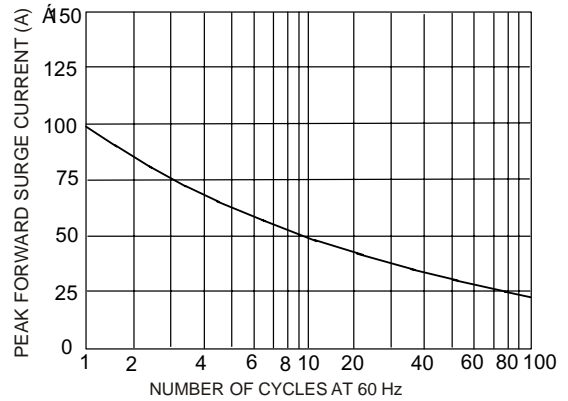


Fig. 2 Surge Current Derating Curve

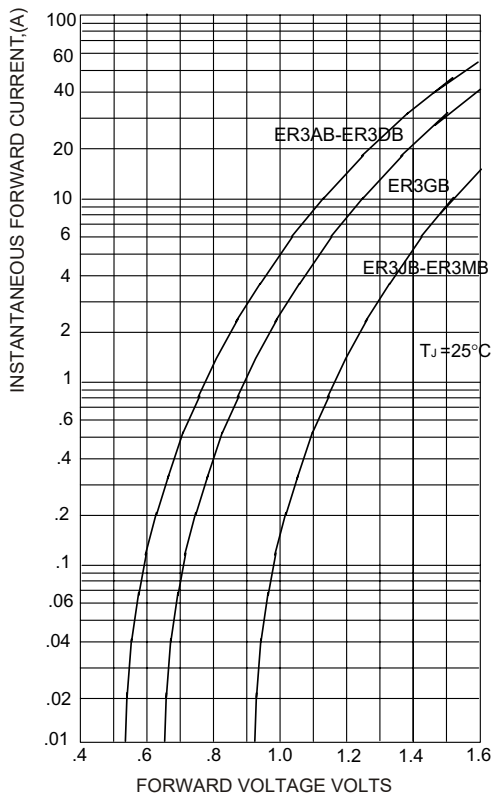


Fig. 3 Typical Forward Characteristics

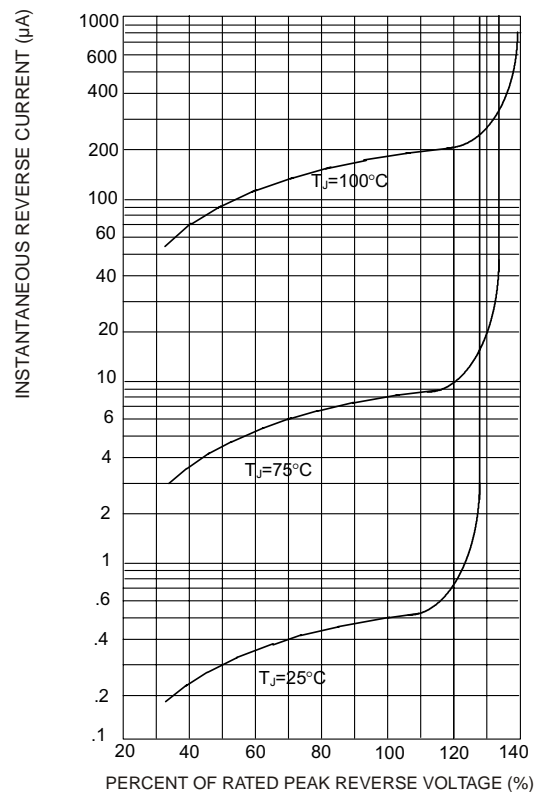


Fig. 4 Typical Reverse Characteristics

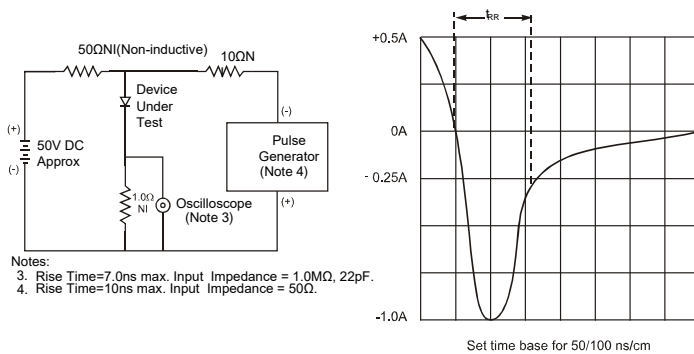


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

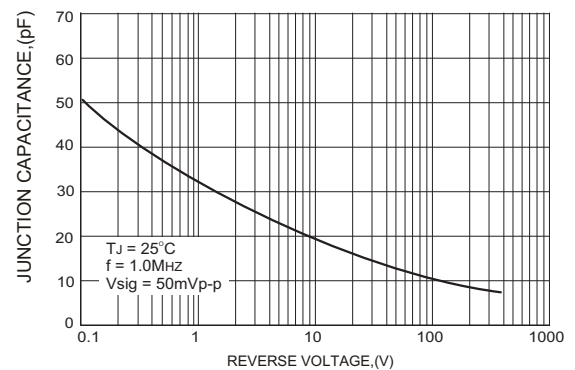


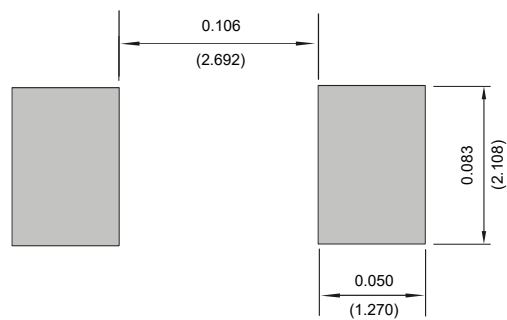
Fig. 6 Typical Junction Capacitance

ER3AB~ER3MB

MOUNTING PAD LAYOUT

SMB / DO-214AA

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
ER3AB~ER3MB	SMB	13 Inch	3000