



YEA SHIN TECHNOLOGY CO., LTD

ER3A THRU ER3J

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE - 50 to 600 Volts CURRENT - 3.0 Ampere



FEATURES

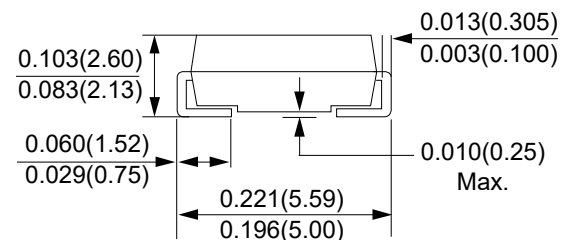
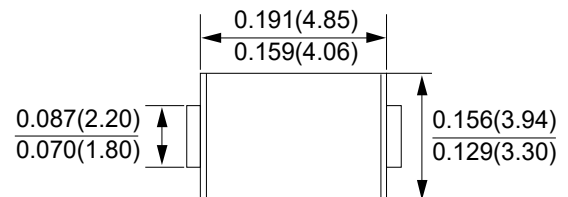
- For surface mounted applications
- Glass passivated junction
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

- Case : DO-214AA(SMB)
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band

SMB/DO-214AA

Unit:inch(mm)



Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	ER3A	ER3B	ER3C	ER3D	ER3E	ER3G	ER3J	Unit
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
Average Rectified Output Current	I _F	3							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	100							A
Forward Voltage @ I _F =3A	V _F	0.95				1.30		1.70	V
Peak Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	I _R	5 200							uA
Maximum Reverse Recovery Time (NOTE 1)	T _{rr}	35							nS
Typical Junction Capacitance (NOTE 2)	C _J	50				25			pF
Typical Thermal Resistance	R _{θJA}	65							°C/W
Operating and Storage Temperature Range	T _J , 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 4.0V DC.

DEVICE CHARACTERISTICS

ER3A THRU ER3J

FIG. 1-Reverse Recovery Time Characteristic and Test Circuit

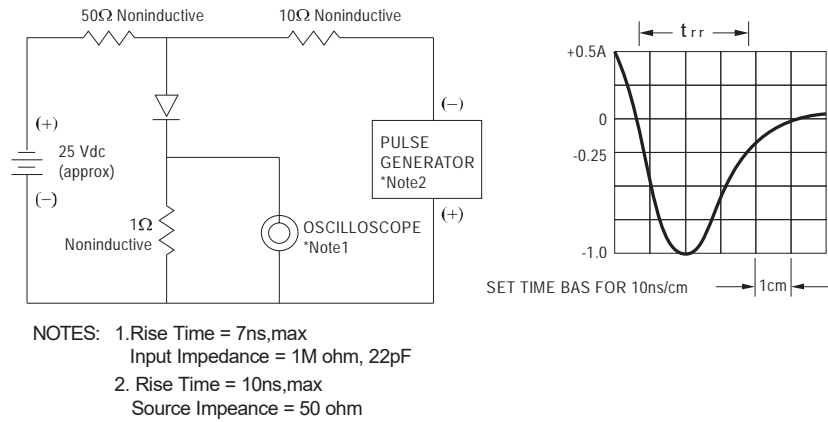


FIG. 2-Average Current Derating Curve

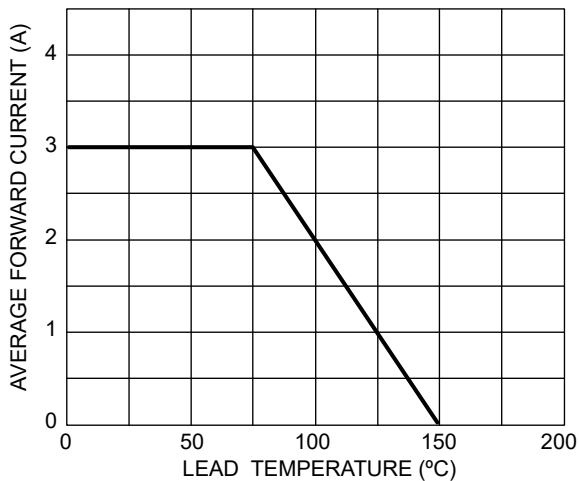


FIG. 3-Typical Reverse Characteristics

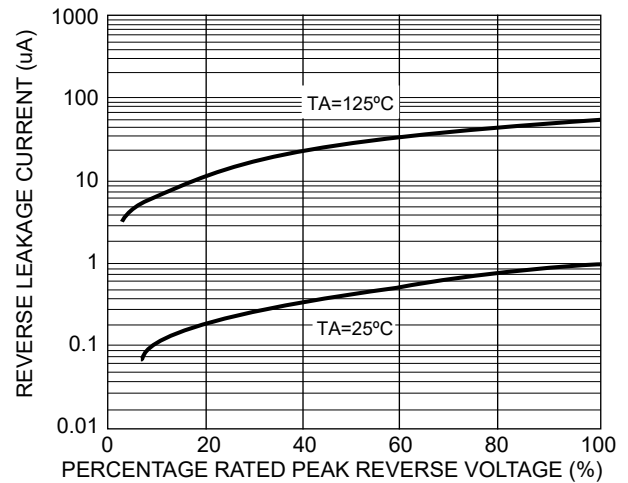


FIG. 4-Typical Forward Characteristics

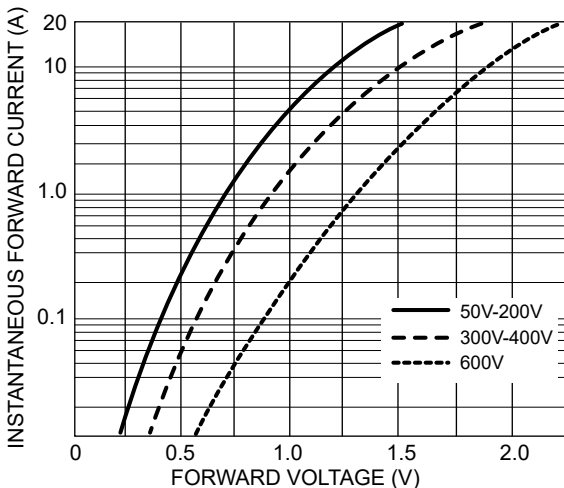


FIG. 5-Maximum Non-Repetitive Forward Surge Current

