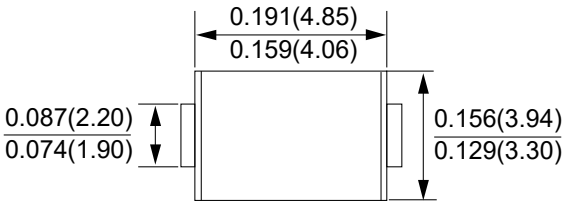
YEA SHIN TECHNOLOGY CO. , LTD FR2A-A THRU FR2M-A

Fast Recovery Surface Mount Rectifier
Voltage 50 to 1000Volts Current 2.0Amperes

FEATURES

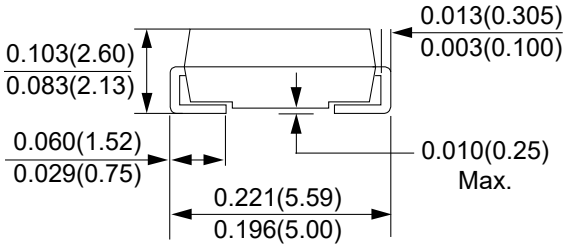
- High current capability
- High surge current capability
- Low reverse current
- AEC-Q101 qualified

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



MECHANICAL DATA

- Case：DO-214AA(SMB)
- Case Material：Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals：Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity：Cathode Band



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

Parameter	Symbol	FR2A-A	FR2B-A	FR2D-A	FR2G-A	FR2J-A	FR2K-A	FR2M-A	Unit
Maximum Repetitive 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 Rectified Current	I_F	2							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage IF=2A	V_F	1.3							V
Maximum DC Reverse Current @ TC=25°C at Rated DC Blocking Voltage @ TC=100°C	I_R	5 100							uA
Maximum Reverse Recovery Time (NOTE 1)	trr	150				250	500		ns
Typical Junction Capacitance (NOTE 2)	C_J	17							pF
Typical Thermal Resistance	$R_{\theta JC}$	42							°C/W
Operating 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 4.0V DC.

DEVICE CHARACTERISTICS

FR2A-A THRU FR2M-A

FIG. 1-Typical Forward Current Derating Curve

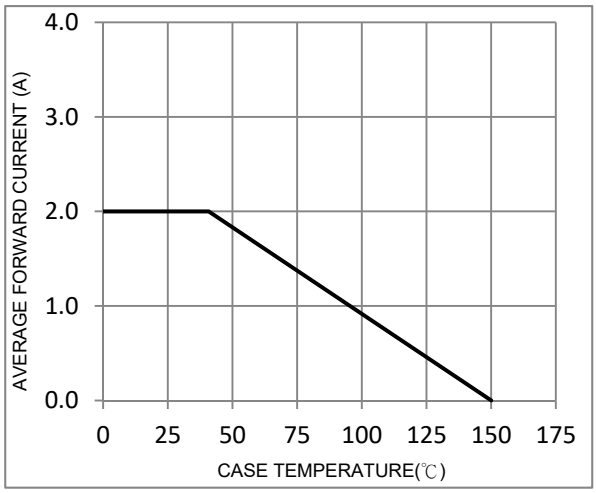


FIG. 2-Typical Forward Characteristics

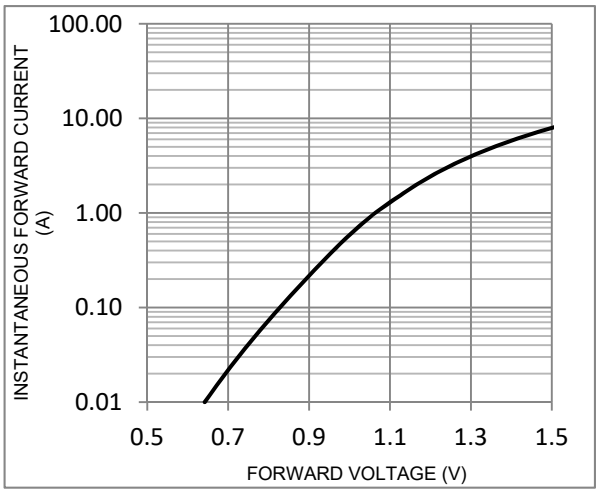


FIG. 3-Maximum Non-Repetitive Forward Surge Current

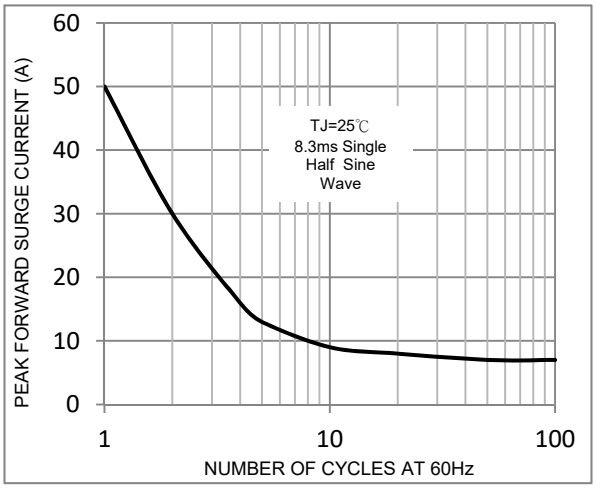


FIG. 4-Typical Reverse Characteristics

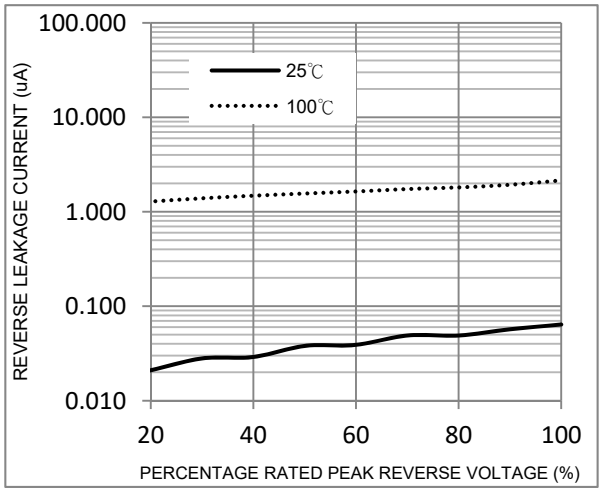


FIG. 5-Typical Junction Capacitance