YENYO

FS2A THRU FS2J

Surface Mount Super Fast Recovery Rectifier

Voltage Range 50 to 600 V
Current 2.0 Ampere

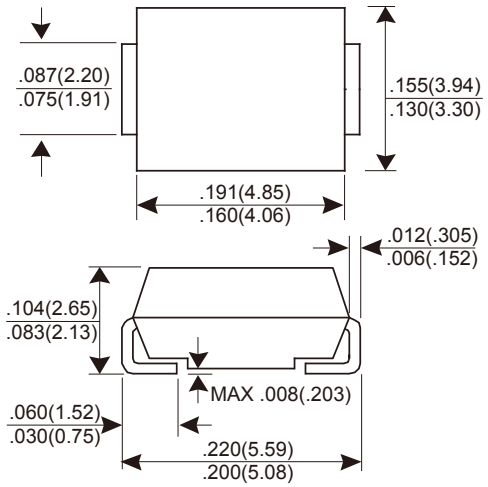
Features

- ✶ Fast switching for high efficiency
- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ Low reverse leakage current
- ✶ High surge current capability

Mechanical Data

- ✶ Case: Molded plastic, SMB/DO-214AA
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-750, method 2026
- ✶ Polarity: Color band denotes cathode end
- ✶ Mounting position: Any

SMB/DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	FS2A	FS2B	FS2D	FS2G	FS2J	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	V
Maximum average forward rectified current @T_L=110℃	$I_{F(AV)}$	2.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	50					A
Maximum instantaneous forward voltage @ I_F=2.0A	V_F	0.95			1.3	1.7	V
Maximum DC reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	1 350					μA
Maximum reverse recovery time (Note 1)	t_{rr}	35					ns
Typical thermal resistance from junction to ambient (Note 2)	$R_{\theta JA}$	75					℃/W
Typical thermal resistance from junction to lead (Note 2)	$R_{\theta JL}$	20					℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150					℃

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, I_R = 1.0A, Irr = 0.25A.
(2) Mounted on PCB with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas.

RATINGS AND CHARACTERISTICS CURVES FS2A THRU FS2J

Fig.1 - Forward Current Derating Curve

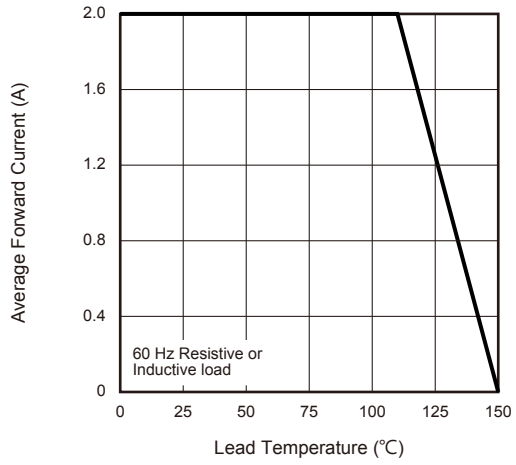


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

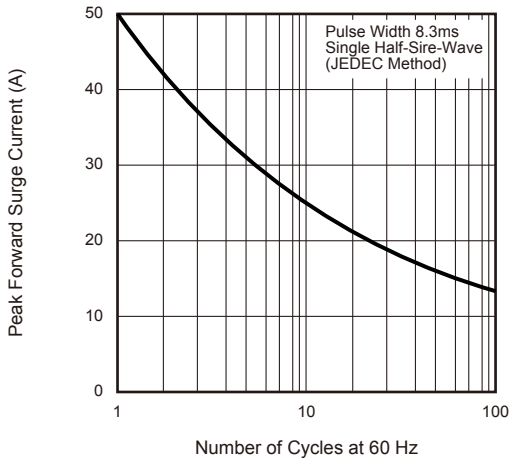


Fig.3 - Typical Instantaneous Forward Characteristics

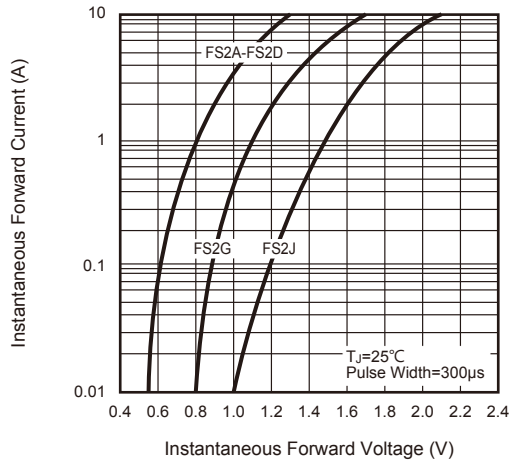


Fig.4 - Typical Reverse Leakage Characteristics