YENYO

FS2A THRU FS2K

Surface Mount Super Fast Recovery Rectifier

Voltage Range 50 to 800 V
Current 2.0 Ampere

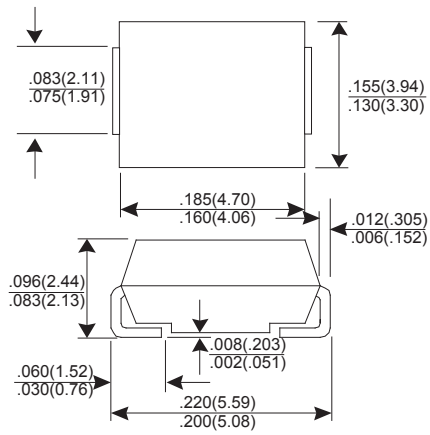
Features

- ✶ Fast switching for high efficiency
- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ Low reverse leakge current
- ✶ High surge current capability
- ✶ Glass passivated chip

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
- ✶ Mounting position: Any
- ✶ Weight: 0.093 gram

SMB-DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C 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	FS2K	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward Rectified Current T_A=110°C	$I_{F(AV)}$	2.0						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60						A
Maximum Instantaneous Forward Voltage @ 2.0 A	V_F	0.95			1.25	1.7	2.2	V
Maximum DC Reverse Current @T_A=25°C At Rated DC Blocking Voltage @T_A=125°C	I_R	5.0 100						uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	35						nS
Typical junction Capacitance (Note 2)	C_J	25						pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	20						°CW
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150						°C

NOTES : (1) Measured With IF=0.5A ,Ir=1.0A,Irr=0.25A.See figure 5.
(2) Measured at 1.0 MHZ and applied reverse voltage of 4.0 V DC.
(3) Mounted on P.C. Board 5mm X 5mm copper pad area.

RATINGS AND CHARACTERISTIC CURVES FS2A THRU FS2K

FIG.1 - FORWARD CURRENT DERATING CURVE

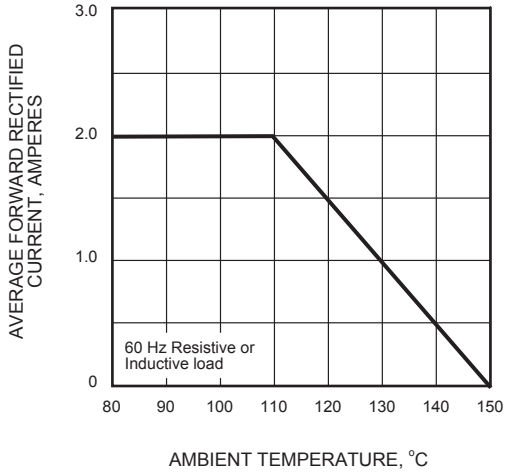


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

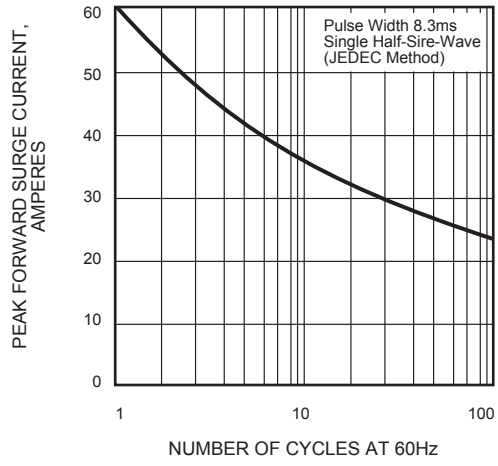


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

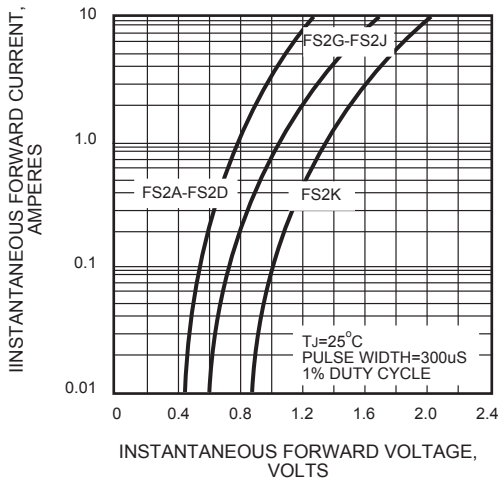


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

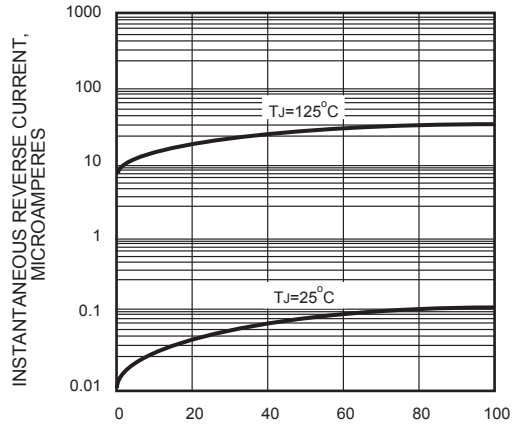
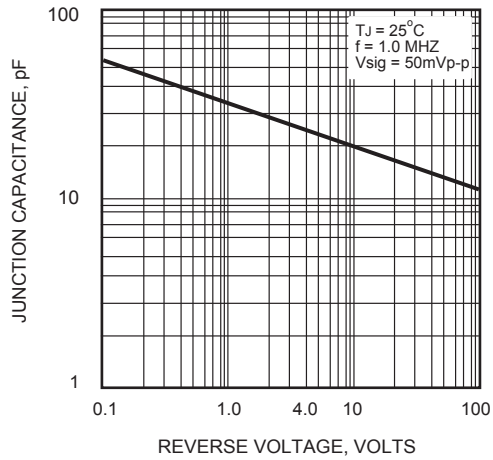


FIG.5 - TYPICAL JUNCTION CAPACITANCE



YENYO TECHNOLOGY CO., LTD.