



YENYO

# FS2A THRU FS2K

Surface Mount Super Fast Recovery Rectifier

## Features

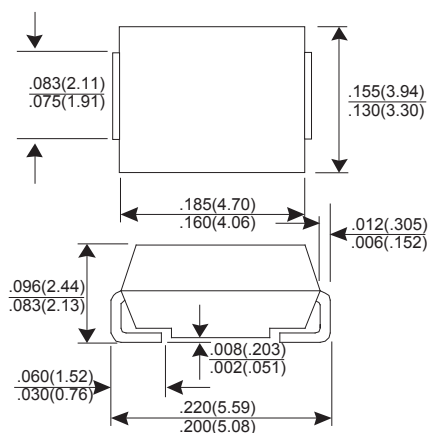
- ★ Fast switching for high efficiency
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability
- ★ Glass passivated chip

## 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

**Voltage Range 50 to 800 V**  
**Current 2.0 Ampere**

## SMB-DO-214AA



## 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                                                            | VRRM     | 50          | 100  | 200  | 400  | 600  | 800  | V    |
| Maximum RMS Voltage                                                                               | VRMS     | 35          | 70   | 140  | 280  | 420  | 560  | V    |
| Maximum DC Blocking Voltage                                                                       | VDC      | 50          | 100  | 200  | 400  | 600  | 800  | V    |
| Maximum Average Forward Rectified Current TA=110°C                                                | IF(AV)   | 2.0         |      |      |      |      |      | A    |
| Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method) | IFSM     | 60          |      |      |      |      |      | A    |
| Maximum Instantaneous Forward Voltage @ 2.0 A                                                     | VF       | 0.95        |      |      | 1.25 | 1.7  | 2.2  | V    |
| Maximum DC Reverse Current @TA=25°C                                                               | IR       | 5.0         |      |      |      |      |      | uA   |
| At Rated DC Blocking Voltage @TA=125°C                                                            |          | 100         |      |      |      |      |      | uA   |
| Maximum Reverse Recovery Time (Note 1)                                                            | Trr      | 35          |      |      |      |      |      | nS   |
| Typical junction Capacitance (Note 2)                                                             | CJ       | 25          |      |      |      |      |      | pF   |
| Typical Thermal Resistance (Note 3)                                                               | RθJA     | 20          |      |      |      |      |      | °CW  |
| Operating Junction and Storage Temperature Range                                                  | TJ, TSTG | -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

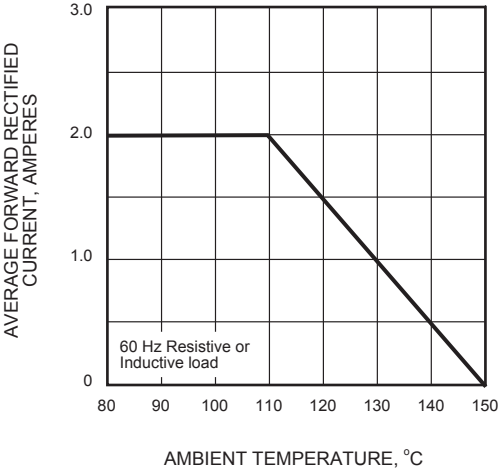


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

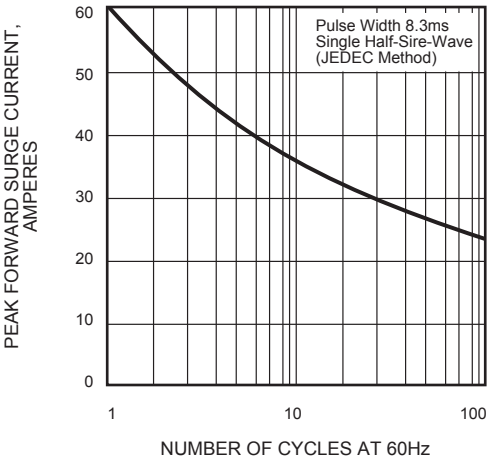


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

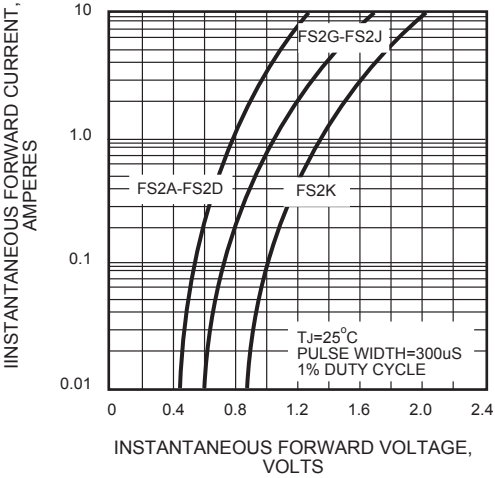


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

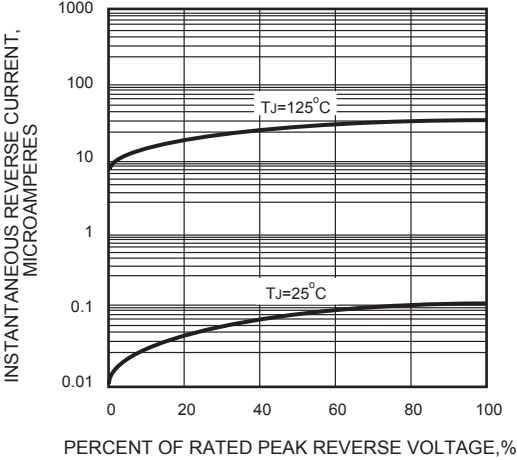


FIG.5 - TYPICAL JUNCTION CAPACITANCE

