

EFS2A THRU EFS2J

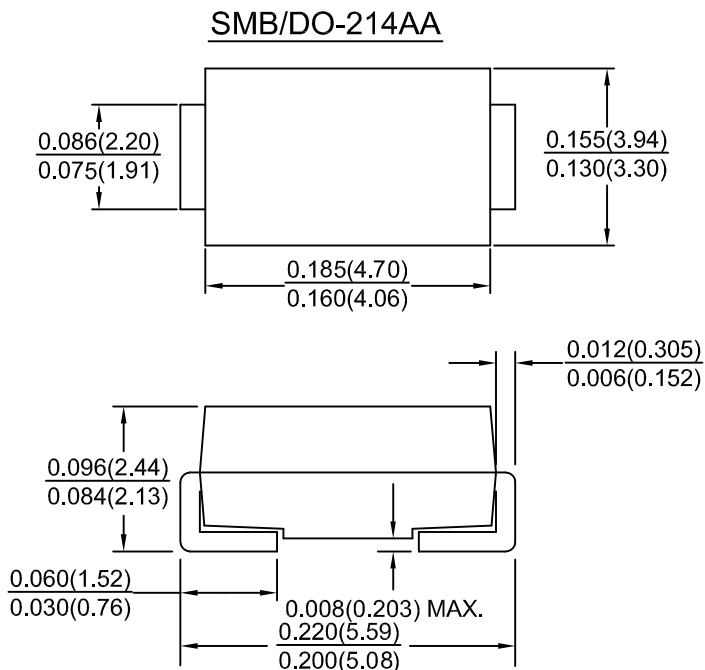
SURFACE MOUNT EFFICIENT FAST RECOVERY RECTIFIER

FEATURES:

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

MECHANICAL DATA

Case: Molded plastic SMB/DO-214AA
Terminals: Solderable per MIL-STD-750 method 2026
Epoxy: UL 94V-0
Polarity: Color band denotes cathode
Mounting position: Any
Weight: 0.093 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.

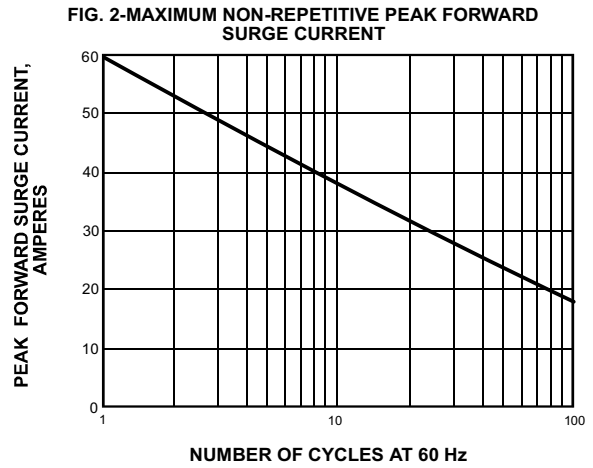
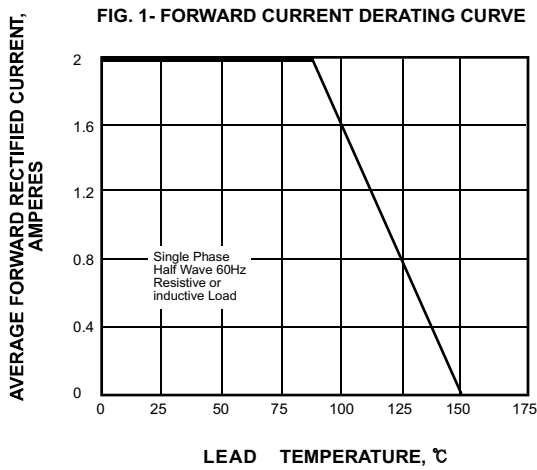
Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	EFS2A	EFS2B	EFS2D	EFS2G	EFS2J	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_A=90^\circ\text{C}$	$I_{(AV)}$	2.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60					Amps
Maximum instantaneous forward voltage at 2.0A	V_F	0.875			1.1	1.25	Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0 100					μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	25			35	50	ns
Typical junction capacitance (NOTE 2)	C_J	50					pF
Typical thermal resistance (NOTE 3)	R_{th-JA}	55					$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150					$^\circ\text{C}$

Note: 1. Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. Thermal resistance junction to ambient

RATINGS AND CHARACTERISTIC CURVES EFS2A THRU EFS2J



8.3ms SINGLE HALF SINE-WAVE
(JEDEC Method) $T_J=25^\circ\text{C}$

