

# FS1AW~FS1MW

## FAST RECOVERY PLASTIC RECTIFIER

**VOLTAGE** 50 to 1000 Volt **CURRENT** 1 Ampere

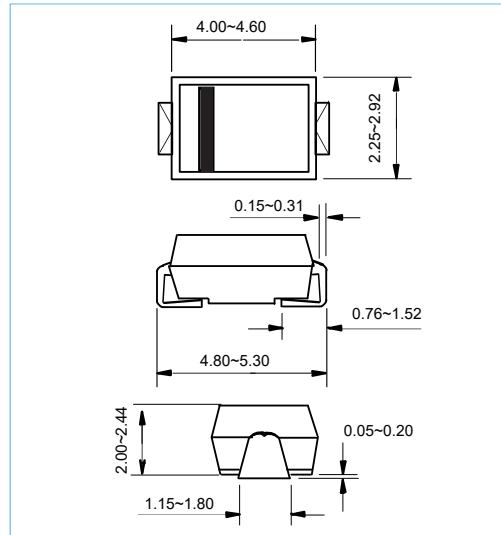
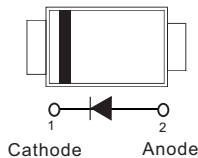
**SMAW** Unit:mm

### FEATURES

- Low Forward Voltage Drop
- High Current Capability
- Moisture Sensitivity Level 1
- Lead free in compliance with EU RoHS 2.0

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	FS1AW	FS1BW	FS1DW	FS1GW	FS1JW	FS1KW	FS1MW	UNITS
Maximum Recurrent 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 Current (see FIG.1)	$I_{F(AV)}$	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Maximum Forward Voltage at 1A	$V_F$	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	$I_R$	5 200							uA
Maximum Reverse Recovery Time(Note 1)	$t_{rr}$	150			250		500		ns
Thermal Resistance	$R_{\theta JL}$	15							$^{\circ}C / W$
Typical Junction Capacitance (Note2)	$C_J$	15							pF
Operating Junction Temperature Range	$T_J$	-55 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

#### 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 4.0 volt

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## RATING AND CHARACTERISTIC CURVES

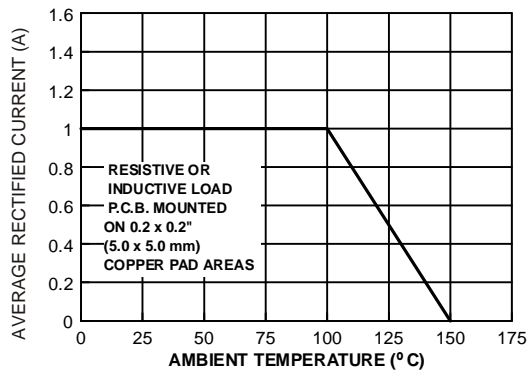


Fig. 1 Forward Current Derating Curve

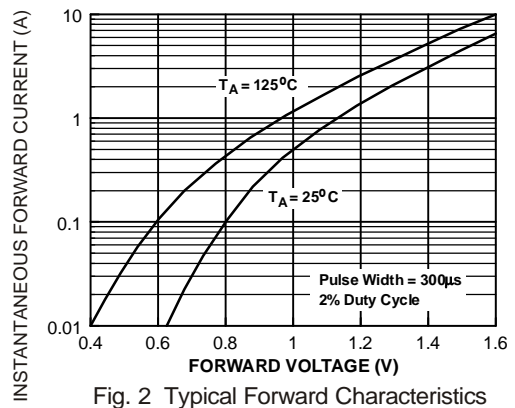


Fig. 2 Typical Forward Characteristics

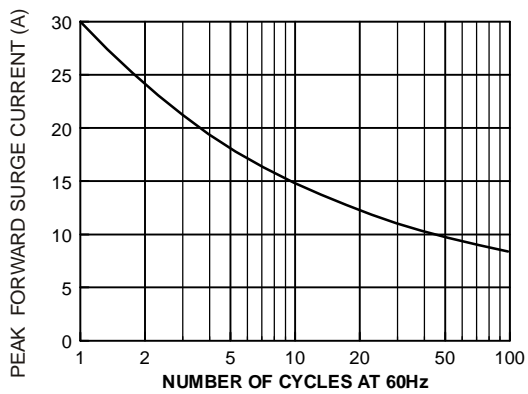


Fig. 3 Forward Surge Current Derating Curve

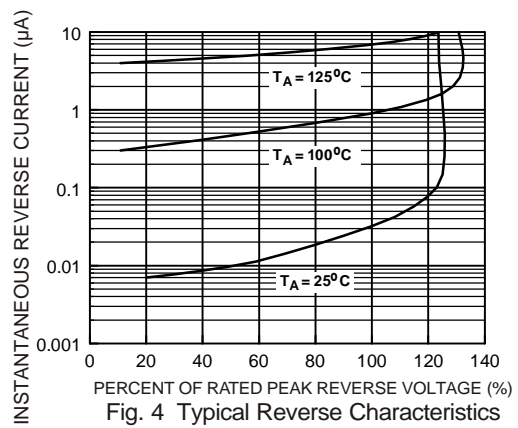


Fig. 4 Typical Reverse Characteristics

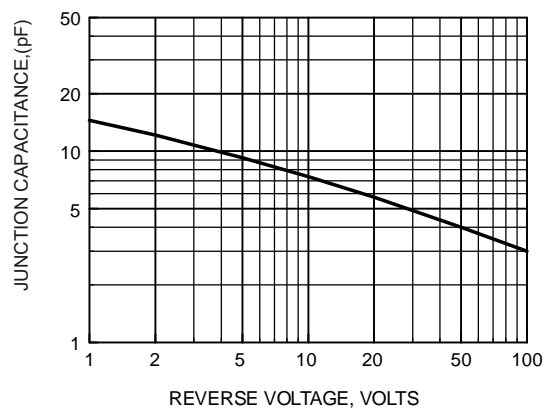


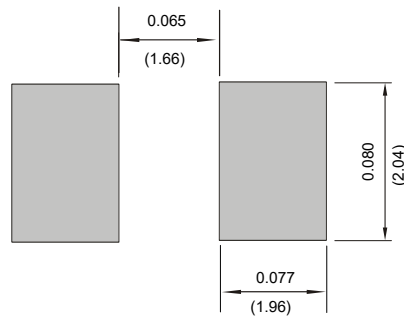
Fig. 5 Typical Junction Capacitance

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## MOUNTING PAD LAYOUT

### SMAW

Unit:Inch(mm)



## ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
FS1AW~FS1MW	SMAW	13 Inch	6000