5.0 Amp. Surface Mount Glass Passivated Rectifier

DO-214AB (SMC)

Voltage
50 V to 1000 V

Current
5.0 A

HYPERECTIFIER®

FEATURES

- Low profile package
- Ideal for automated placement
- Low forward voltage drop
- High forward surge current capability
- Solder dip 260°C, 10s
- AEC-Q101 qualified
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C
- Low leakage current

AUTOMOTIVE GRADE Available

Pb

e3

RoHS COMPLIANT

MECHANICAL DATA

- **Case:** DO-214AB (SMC). Epoxy meets UL 94V-0 flammability rating.
- **Polarity:** Color band denotes cathode end.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.
- **HE3 suffix** for high reliability grade, meets JESD 201 class 2 whisker test.

TYPICAL APPLICATIONS

Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.

Maximun Ratings and Electrical Characteristics at 25°C

		FS5A	FS5B	FS5D	FS5G	FS5J	FS5K	FS5M
Marking Code		O1	O2	O3	O4	O5	O6	O7
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	50	100	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	35	70	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward current at T_C = 75 °C	5.0 A						
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	100 A						
V_F	Maximum Instantaneous Forward Voltage at 5.0A	1.15 V						
I_R	Maximum DC Reverse Current Tc = 25 °C at Rated DC Blocking Voltage Tc = 125 °C	10 µA 250 µA						
C_j	Typical Junction Capacitance (1MHz; -4V)	60 pF						
$R_{th\ (j-l)}$ $R_{th\ (j-a)}$	Typical Thermal Resistance (5x5 mm^2 x 130 µ Copper Area)	13 °C/W 47 °C/W						
T_j - T_{stg}	Operating Junction and Storage Temperature Range	-55 to + 150 °C						

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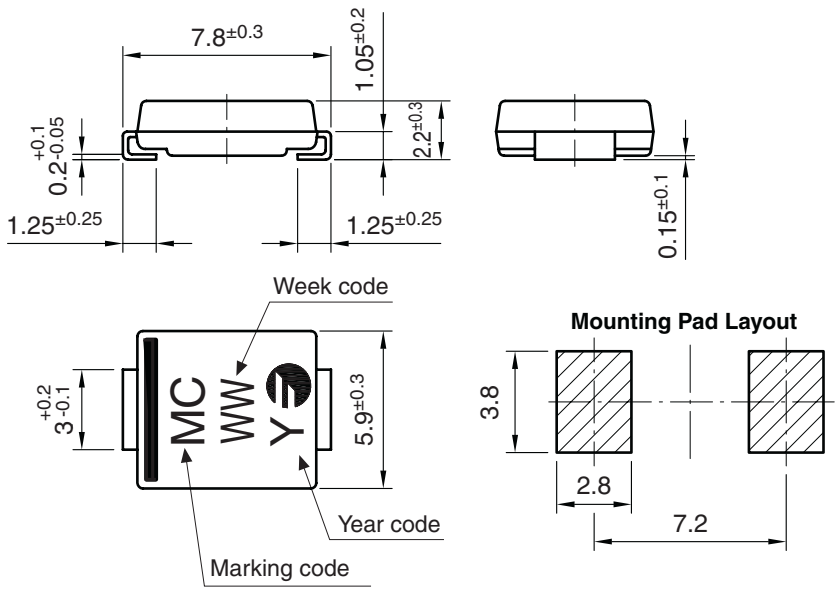
Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FS5J TRTB	TRTB	13" diameter tape and reel	3,500	0.201
FS5J HE3 TRTB	TRTB	13" diameter tape and reel	3,500	0.201

Package Outline Dimensions: (mm) DO-214AB (SMC)



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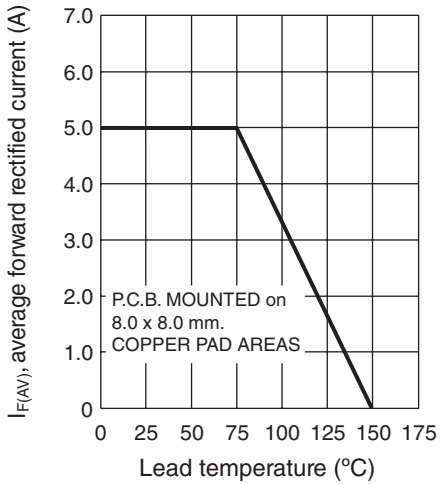
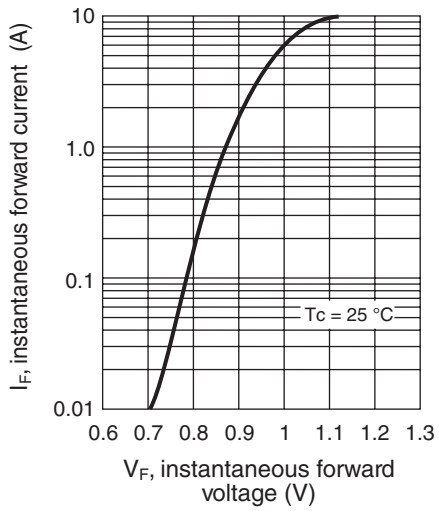
Ratings and Characteristics (Ta 25 ºC unless otherwise noted)

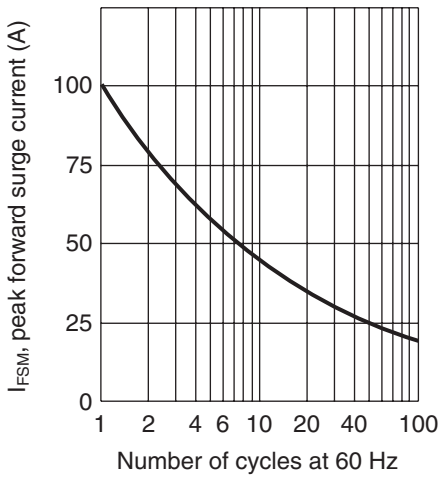
FORWARD CURRENT DERATING CURVE



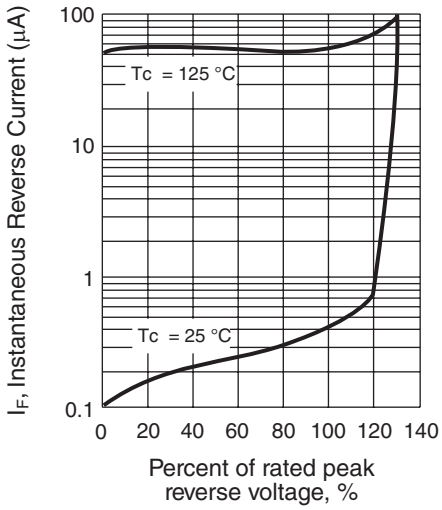
TYPICAL FORWARD CHARACTERISTIC



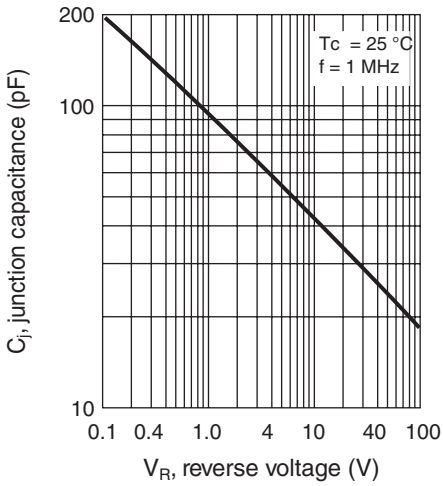
MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION
CAPACITANCE



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