SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

FM201-FM207

Switching Mode Power Supply Applications
DC/DC Converter Applications

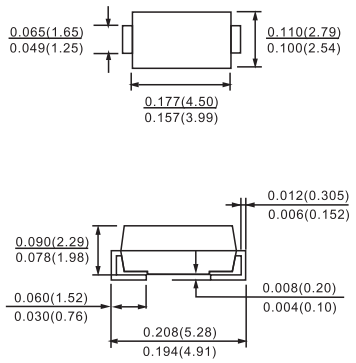
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

Mechanical Data

Case: JEDEC DO-214AC molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
High temperature soldering guaranteed: 250°C/10 seconds 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 ounce, 0.34 gram

DO-214AC(SMA)



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	FM201	FM202	FM203	FM204	FM205	FM206	FM207	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	I_O	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	70							Amps
Typical Thermaesistance	(Note 2)$R_{\theta JL}$	20							°C/W
	(Note 3)$R_{\theta JA}$	50							°C/W
Typical Junction Capacitance (Note 1)	C_J	30							pF
Operating and Storage Temperature Range	T_J,T_{STG}	-65 to + 175							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	FM201	FM202	FM203	FM204	FM205	FM206	FM207	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V_F	1.1							Volts
Maximum Average Reverse Current	@TA = 25°C	I_R	5.0							uAmps
at Rated DC Blocking Voltage	@TA = 100°C		50							uAmps

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Thermal resistance junction to terminal, 5X5mm² copper pads to each terminal.
3. Thermal resistance junction to ambient, 5X5mm² copper pads to each terminal.

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RATING AND CHARACTERISTIC CURVES (FM201 THRU FM207)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

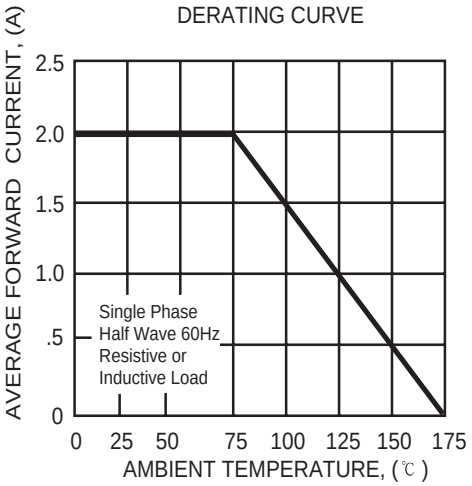


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

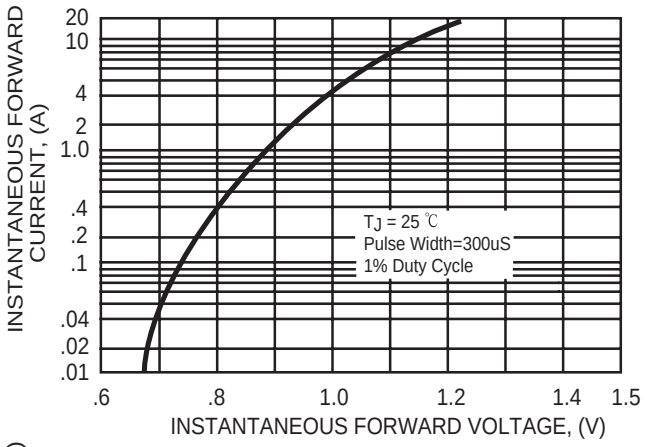


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

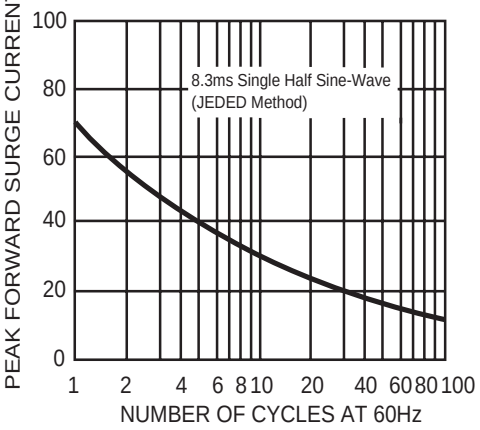


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

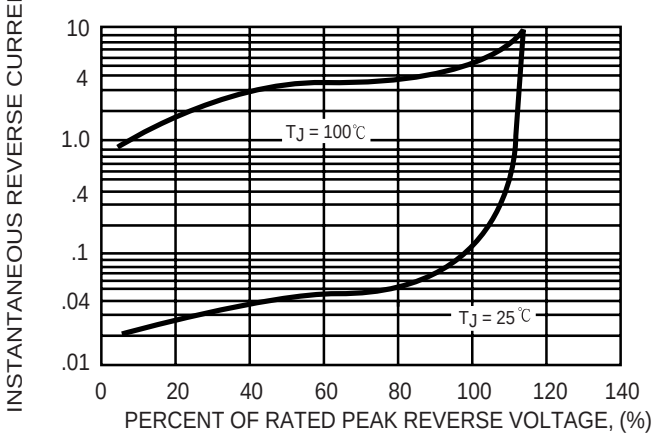
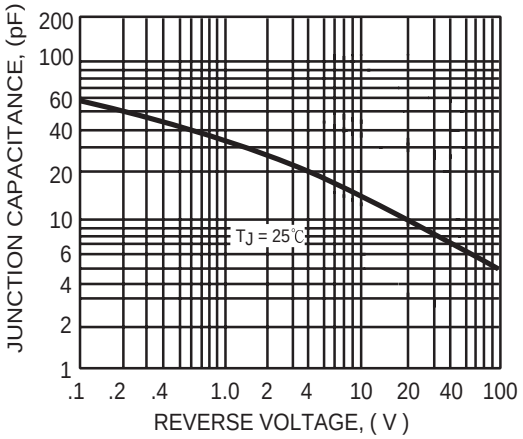


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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