WILLAS

RoHS COMPLIANT

2.0A SUFRACE MOUNT FAST RECOVERY RECTIFIERS-50-1000V

SMB PACKAGE

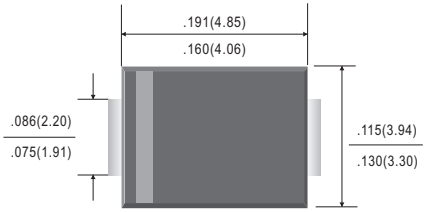
FFM201 THRU FFM207



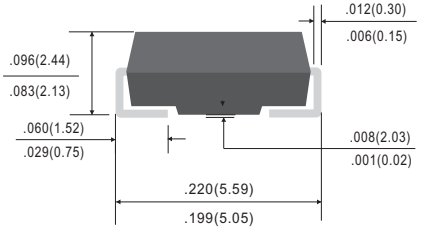
FEATURES

* Glass passivated device
* Ideal for surface mounted applications
* Low leakage current
* Metallurgically bonded construction

SMB/DO-214AA



Marking code: 2F1~2F7



Dimensions in inches and (millimeters)

MECHANICAL DATA

* Case: DO-214AA/SMB Molded plastic
* Epoxy : Device has UL flammability classification 94V-0
* Mounting position: Any
* Weight: 0.095 grams (approximate)
* **Polarity:** Color band denotes cathode end
* Moisture Sensitivity Level 1
* **Pb-Free package is available**
  RoHS product for packing code suffix "G"
  Halogen free product for packing code suffix "H"

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	FFM201	FFM202	FFM203	FFM204	FFM205	FFM206	FFM207	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	I_O	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Maximum Thermal Resistance	(Note 2) $R_{\theta JL}$	30							°C/W
	(Note 3) $R_{\theta JA}$	80							°C/W
Typical Junction Capacitance (Note 1)	C_J	20							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 150							°C

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

CHARACTERISTICS		SYMBOL	FFM201	FFM202	FFM203	FFM204	FFM205	FFM206	FFM207	UNITS
Maximum Forward Voltage at 2.0A DC		V_F	1.3							Volts
Maximum Full Load Reverse Current,Full cycle Average at T_A=50°C		I_R	50							uAmps
Maximum DC Reverse Current at	@T_A = 25°C		5.0							uAmps
Rated DC Blocking Voltage	@T_A = 100°C		100							uAmps
Maximum Reverse Recovery Time (Note 4)		trr	150				250	500		nSec

NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
2. Thermal resistance junction to terminal 6.0mm² copper pads to each terminal.
3. Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.
4. Test Conditions: I_F = 0.5A, I_R = -1.0A, I_{RR} = -0.25A

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FFM201 THRU FFM207

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

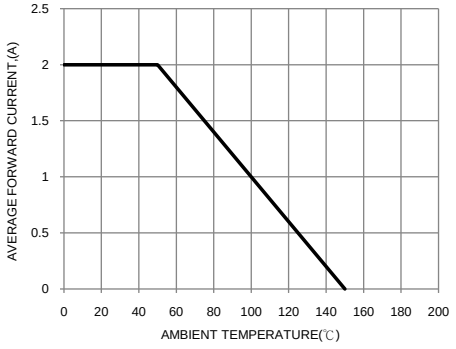


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

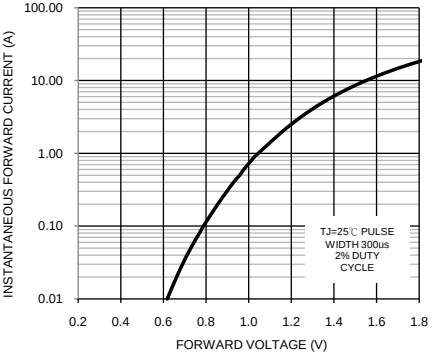


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

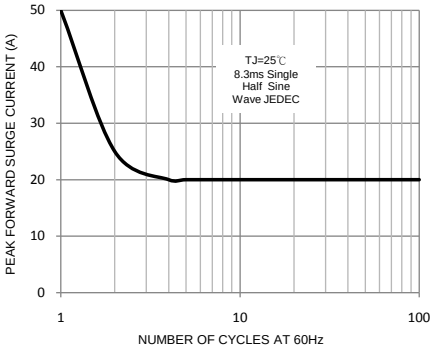


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

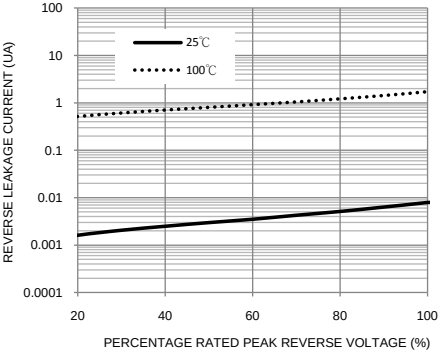


FIG. 5-TYPICAL JUNCTION CAPACITANCE

