



WILLAS



EFM201A

THRU

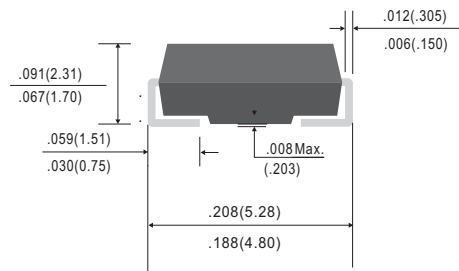
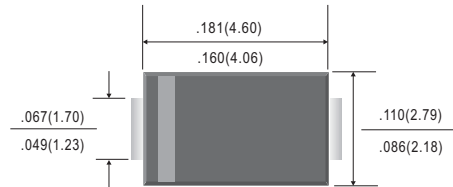
EFM208A

2.0 AMP SUPER FAST RECTIFIER

DO-214AC / SMA PACKAGE

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * RoHS product for packing code suffix "G"
- * Halogen free product for packing code suffix "H"



Dimensions in inches and (millimeters)

MECHANICAL DATA

- * Case: DO-214AC /SMA Molded Plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.066 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive of inductive load.

For capacitive load, derate current by 20%

RATINGS	SYMBOL	EFM201A	EFM202A	EFM203A	EFM204A	EFM205A	EFM206A	EFM208A	UNIT
Marking Code		2E1	2E2	2E3	2E4	2E5	2E6	2E8	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	Volts
Maximum Average Forward Current at TA = 55°C	Io	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50							Amps
Typical Thermal Resistance	RθJA	85							°C/W
Typical Junction Capacitance (Note 2)	CJ	30				20			pF
Operating Temperature Range	TJ	-55 to +175							°C
Storage Temperature Range	TsTG	-65 to +175							°C

CHARACTERISTICS	SYMBOL	EFM201A	EFM202A	EFM203A	EFM204A	EFM205A	EFM206A	EFM208A	UNIT
Maximum Forward Voltage at 2.0A DC(Note 3)	VF	0.95				1.25	1.75		Volts
Maximum Average Reverse Current at	IR	5.0							μAmps
Rated DC Blocking Voltage									
Maximum Reverse Recovery Time (Note 1)	Trr	35							nS

NOTES :1. Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A

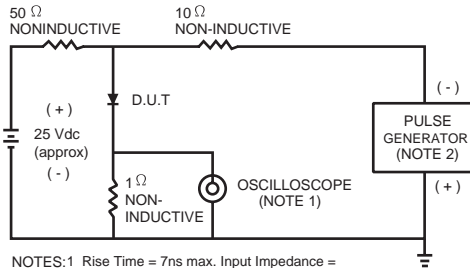
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.



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FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.
 2. Rise Time = 10ns max. Source Impedance = 50 ohms.

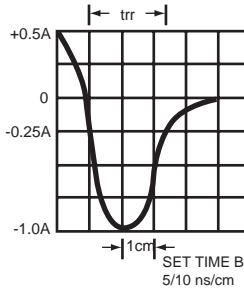


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

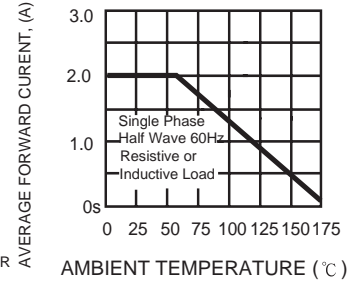


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

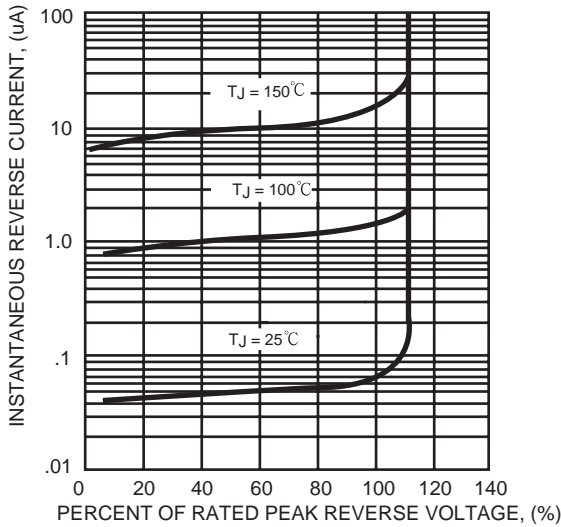


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

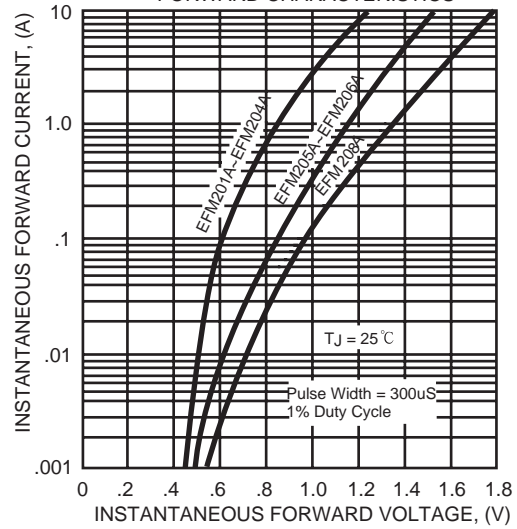


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

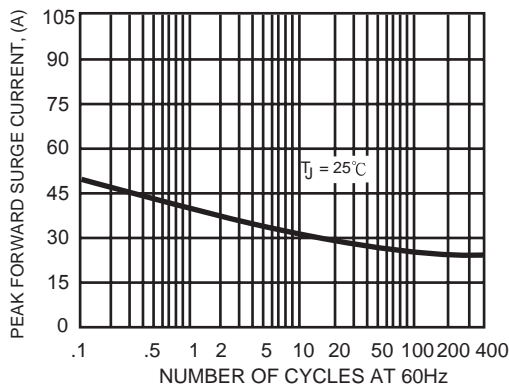


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

