



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**UF2A
THRU
UF2M**

TECHNICAL SPECIFICATIONS OF ULTRA FAST SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 2.0 Amperes

FEATURES

- * Ideal for surface mounted applications
- * Glass passivated junction
- * Low leakage current

MECHANICAL DATA

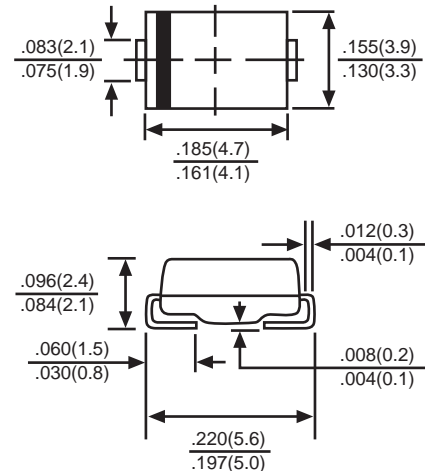
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rated flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.093 gram approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SMB(DO-214AA)



	SYMBOL	UF2A	UF2B	UF2D	UF2G	UF2J	UF2K	UF2M	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 T _A = 55°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}	50							Amps
Maximum Instantaneous Forward Voltage at 2.0A DC	V _F	1.0		1.3		1.7		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T _A =25°C	5.0							μAmps
	@ T _A =100°C	200							
Typical Junction Capacitance (Note 1)	C _J	30							pF
Typical Thermal Resistance (Note 2)	R _{θJL}	20							°C/W
Maximum Reverse Recovery time (Note 3)	t _{rr}	50				100			nSec
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C

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

Note 2: Typical thermal resistance from junction to lead, with 0.28 x 0.28 in² (7 x 7 mm²) copper pads to each terminal.

Note 3: Test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

RATING AND CHARACTERISTIC CURVES (UF2A THRU UF2M)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

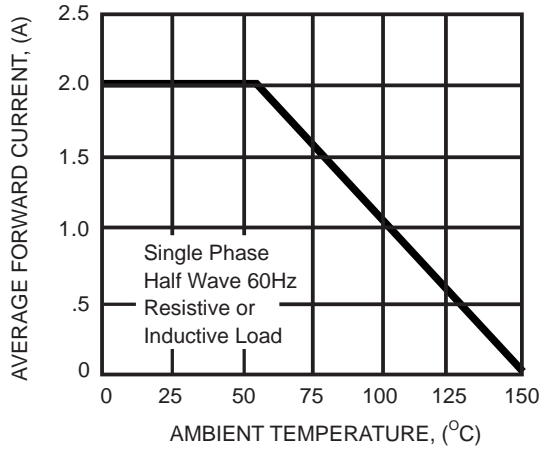


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

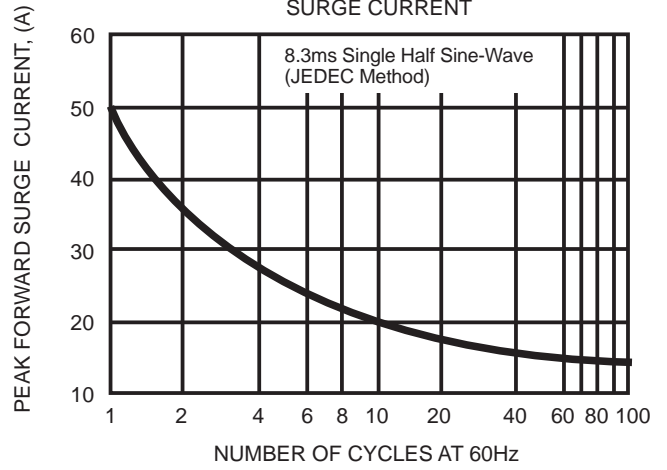


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

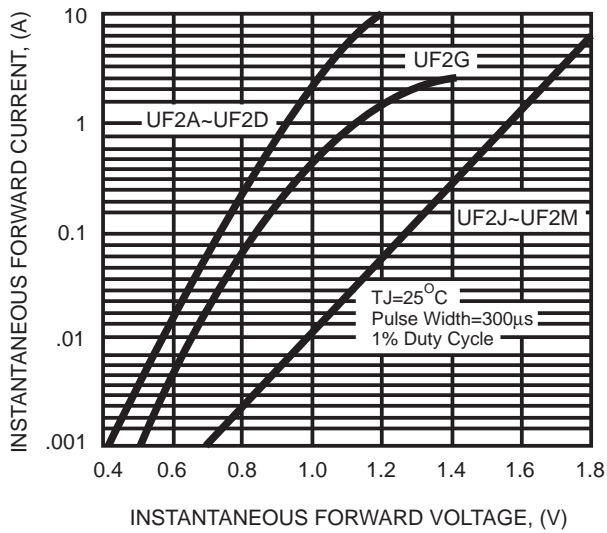
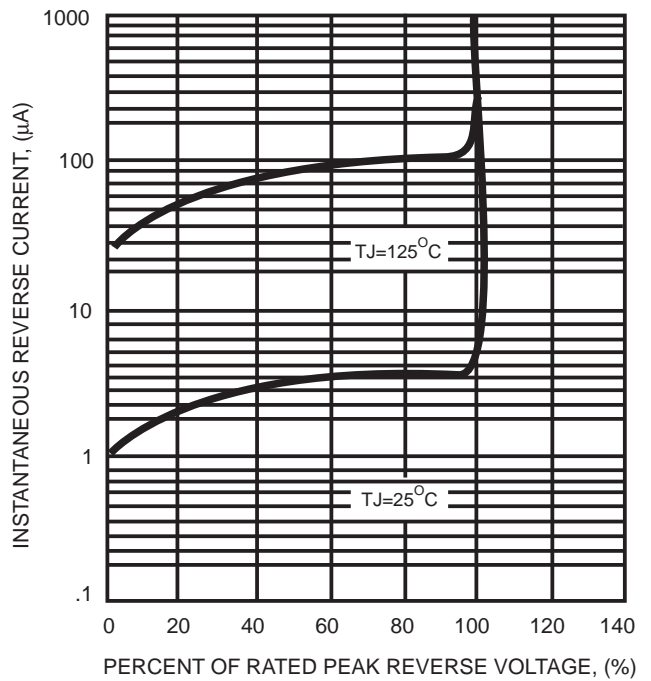


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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