

**SURFACE MOUNT GLASS PASSIVATED
 SUPER FAST SILICON RECTIFIER**

VOLTAGE RANGE 50 to 400 Volts CURRENT 1.0 Ampere

FEATURES

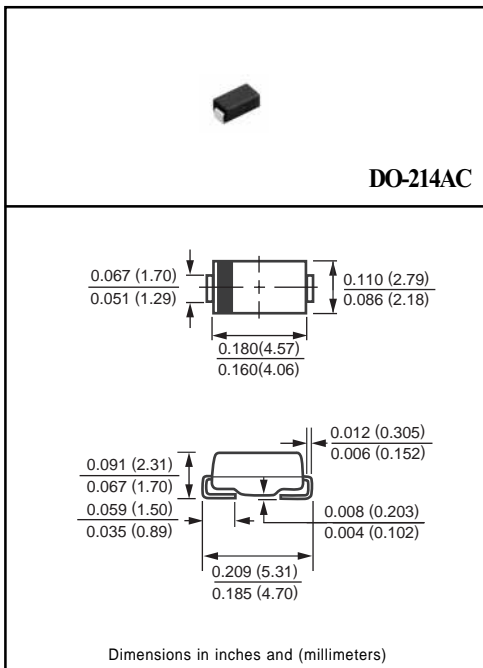
- * Glass passivated device
- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.057 gram

MECHANICAL DATA

- * Epoxy : UL flammability classification 94V-0

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 TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	UFM101	UFM102	UFM103	UFM104	UFM105	UFM106	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	Volts
Maximum RMS Volts	VRMS	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	Volts
Maximum Average Forward Current at TA = 55°C	Io	1.0						Amps
Peak Forward Surge Current IFM (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30						Amps
Typical Junction Capacitance (Note 2)	CJ	15				10		pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175						°C

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

CHARACTERISTICS	SYMBOL	UFM101	UFM102	UFM103	UFM104	UFM105	UFM106	UNITS
Maximum Forward Voltage at 1.0A DC	VF	0.92				1.20		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0						uAmps
		50						
Maximum Reverse Recovery Time (Note 1)	trr	20						nSec

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.

RATING AND CHARACTERISTIC CURVES (UFM101 THRU UFM106)

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

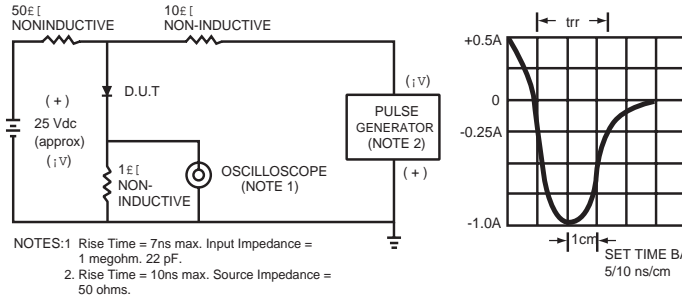


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

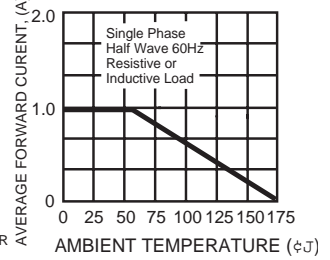


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

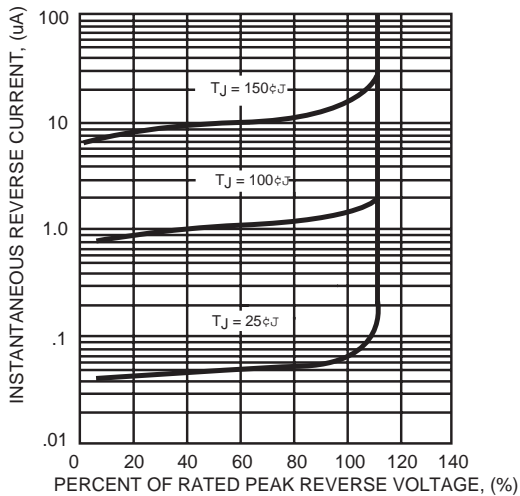


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

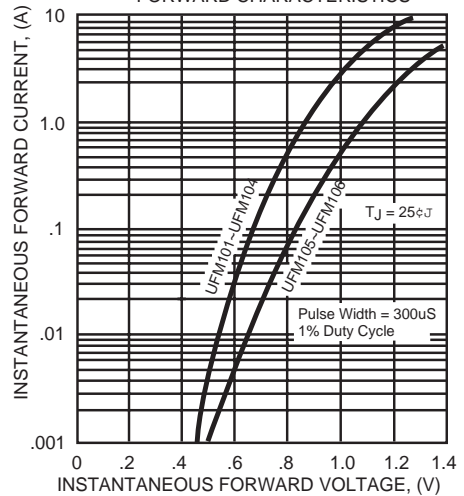


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

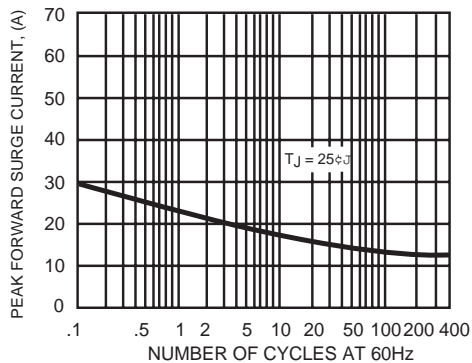


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

