

**SURFACE MOUNT GLASS PASSIVATED
SUPER FAST SILICON RECTIFIER**
VOLTAGE RANGE 50 to 200 Volts CURRENT 3.0 Ampere

FEATURES

- * Glass passivated device
- * For surface mounted applications
- * Ultrafast recovery times dor high efficiency
- * Low forward voltage, low power loss
- * Low leakage current

MECHANICAL DATA

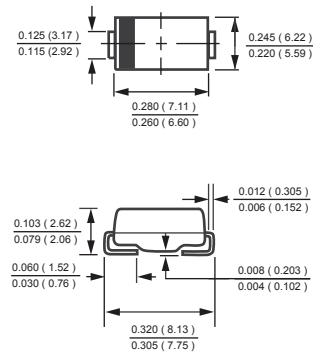
- * Epoxy: Device has UL flammability classification 94V-0
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load.



DO-214AB



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	UFM301	UFM302	UFM303	UFM304	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	Volts
Maximum RMS Voltage	V _{RMS}	35	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	Volts
Maximum Average Forward Rectified Current at T _A = 55°C	I _O	3.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100				Amps
Typical Current Square Time	I ² T	41.4				A ² S
Typical Thermal Resistance (Note 1)	R _{θJA}	47				°C/W
Typical Thermal Resistance (Note 1)	R _{θJL}	12				°C/W
Typical Junction Capacitance (Note 2)	C _J	45				pF
Operating Temperature Range	T _J	150				°C
Storage Temperature Range	T _{STG}	-55 to + 150				°C

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

CHARACTERISTICS	SYMBOL	UFM301	UFM302	UFM303	UFM304	UNITS
Maximum Instantaneous Forward Voltage at 3.0A DC	V _F	0.9				Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	5				uA
	@T _A =150 °C	1				mA
Maximum Reverse Recovery Time (Note 4)	t _{rr}	20				nSec

- NOTES : 1. Thermal Resistance :Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "ROHS compliant"
4. Test Conditions: I_F= 0.5A, I_R= -1.0A, I_{RR}= -0.25A.

2018-10
REV:D

RATING AND CHARACTERISTICS CURVES (UFM301 THRU UFM304)

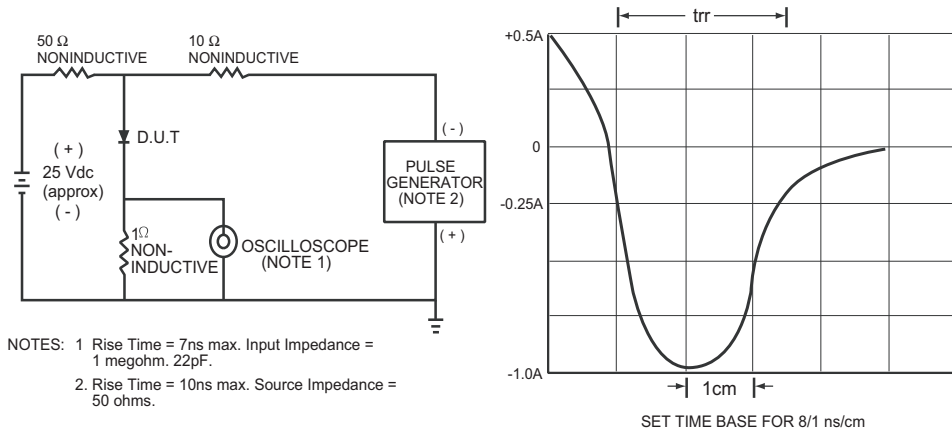


FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

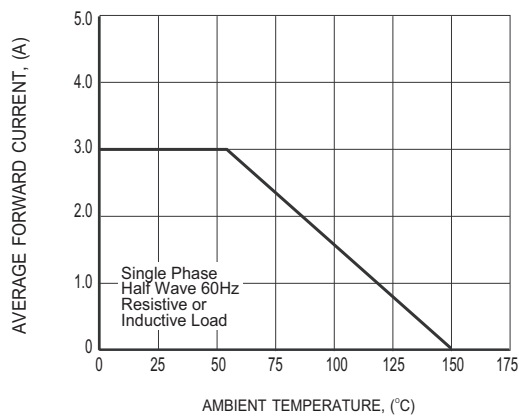


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

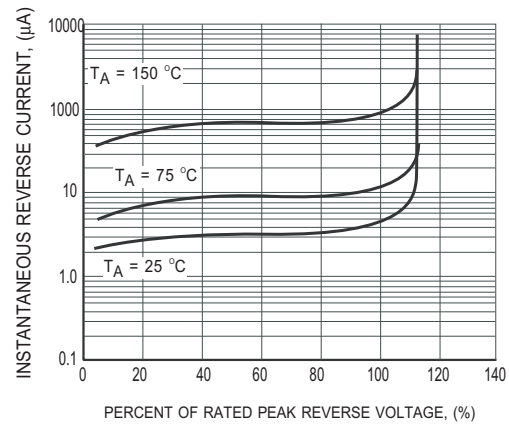


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

RECTRON

RATING AND CHARACTERISTICS CURVES (UFM301 THRU UFM304)

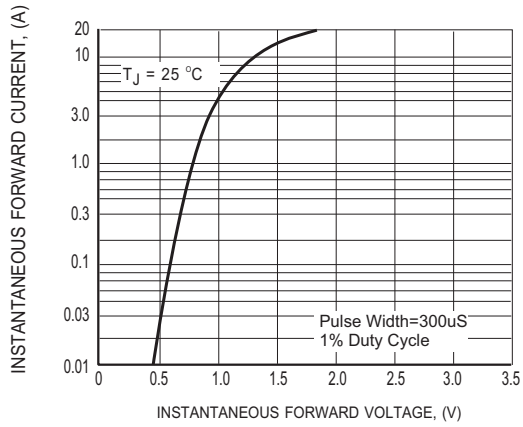


FIG.4 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

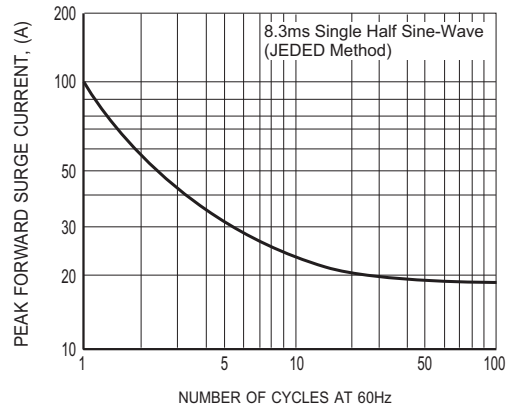


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

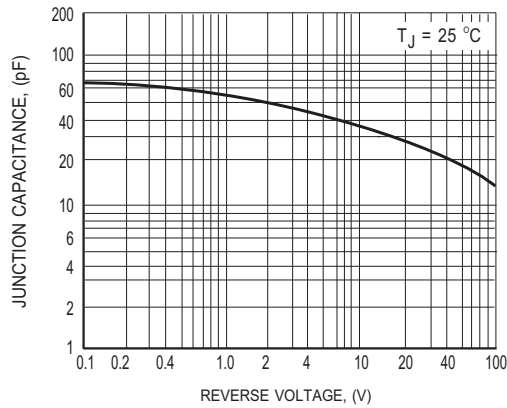
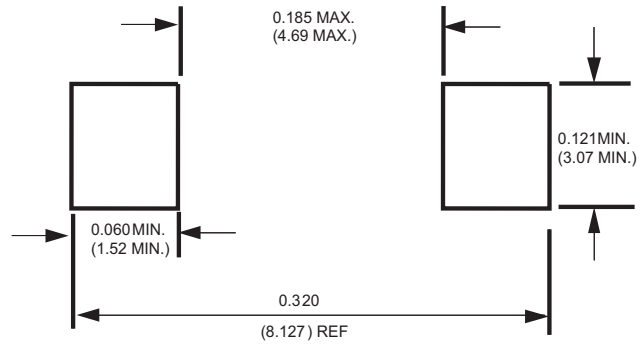


FIG.6 TYPICAL JUNCTION CAPACITANCE

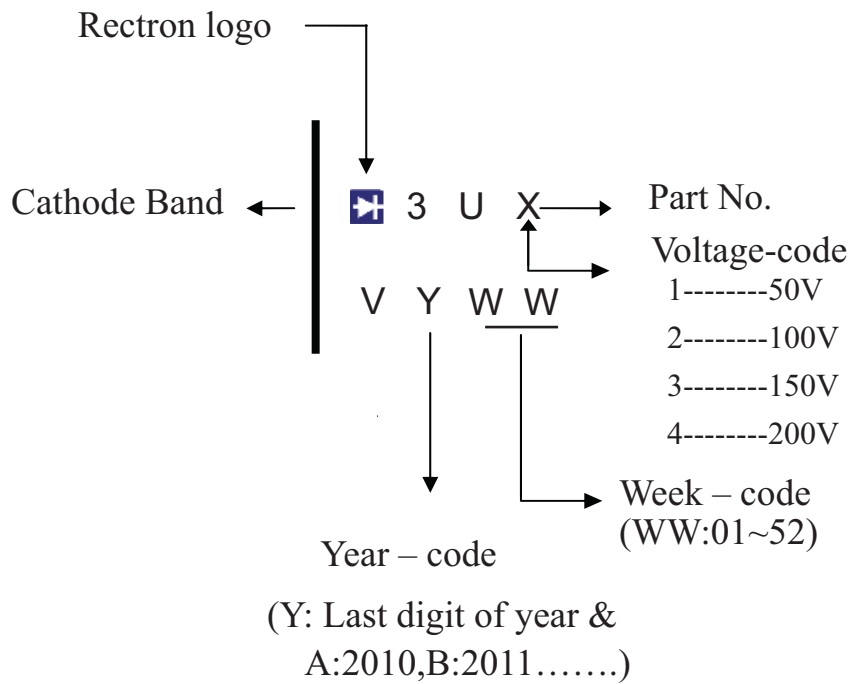
Mounting Pad Layout



Dimensions in inches and (millimeters)



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMC	-W/-T	3,000	3,000	---	---	330	360*355*360	24,000	11.50

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