

RU3MG

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 1000V

CURRENT: 1.5A

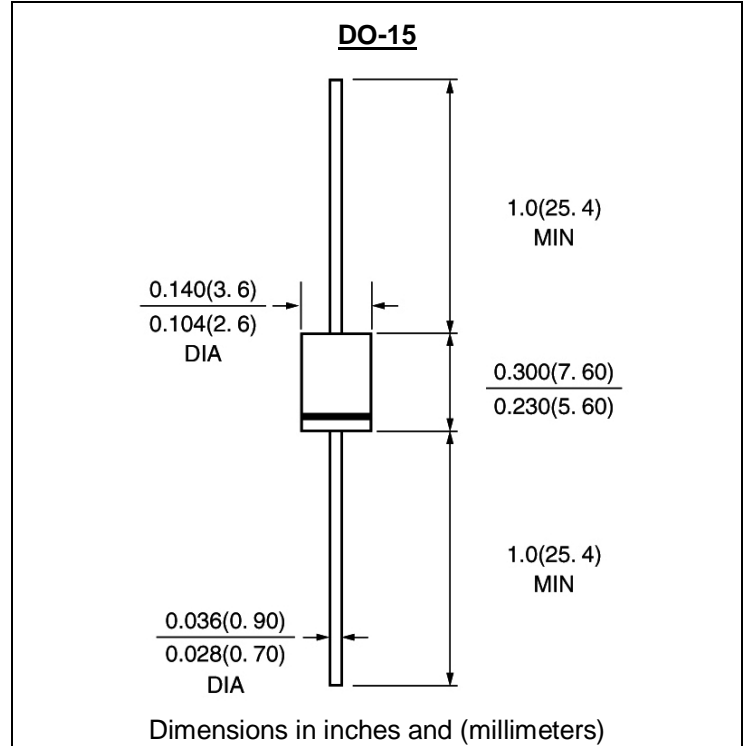


FEATURE

Low power loss
High surge capability
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250°C/10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	RU3MG	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1000	V
Maximum RMS Voltage	V _{rms}	700	V
Maximum DC blocking Voltage	V _{dc}	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	I _{f(av)}	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50	A
Maximum Forward Voltage at rated Forward Current and 25°C IF=1.5A	V _f	2.5	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	10 100	μA μA
Typical Reverse Recovery Time (Note 1)	T _{rr}	75	nS
Typical Junction Capacitance (Note 2)	C _j	50	pF
Typical Thermal Resistance (Note 3)	R _{θ ja}	20	°C /W
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150	°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES RU3MG

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

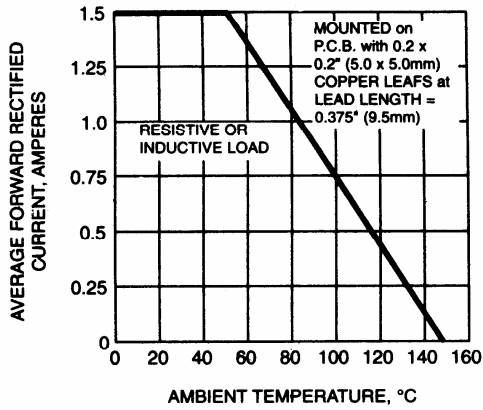


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

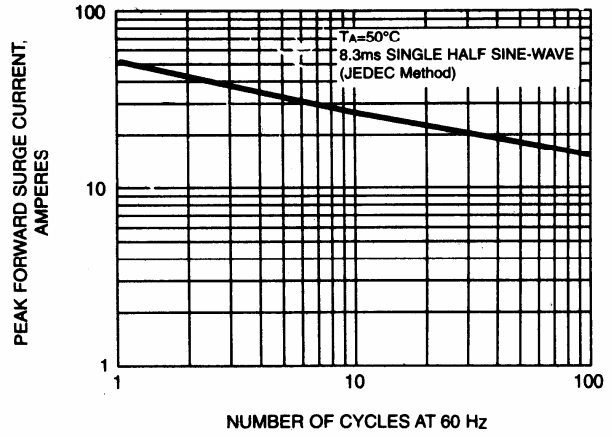


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

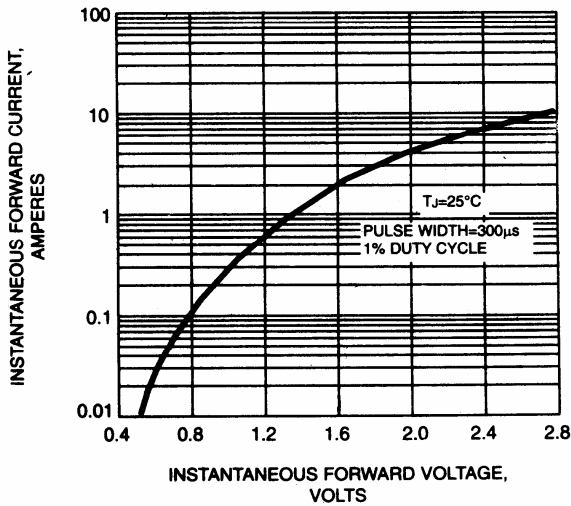


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

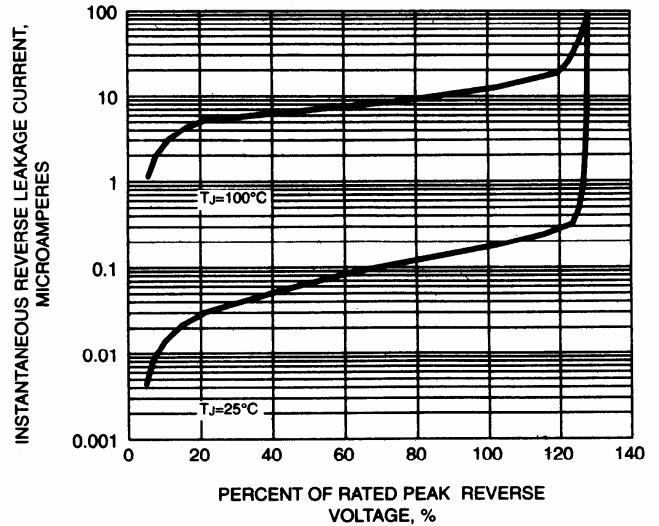


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

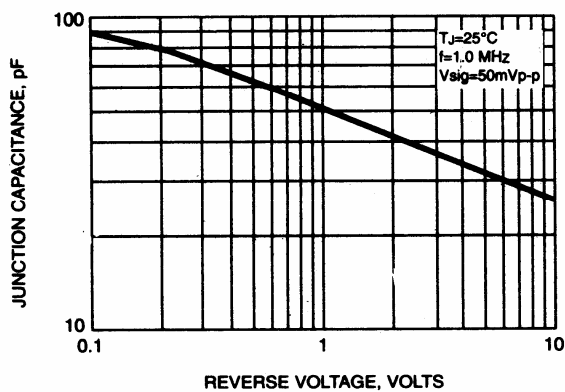


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

