

RG10 - RG10Y

PRV : 70 - 600 Volts

Io : 1.0 - 1.5 Amperes

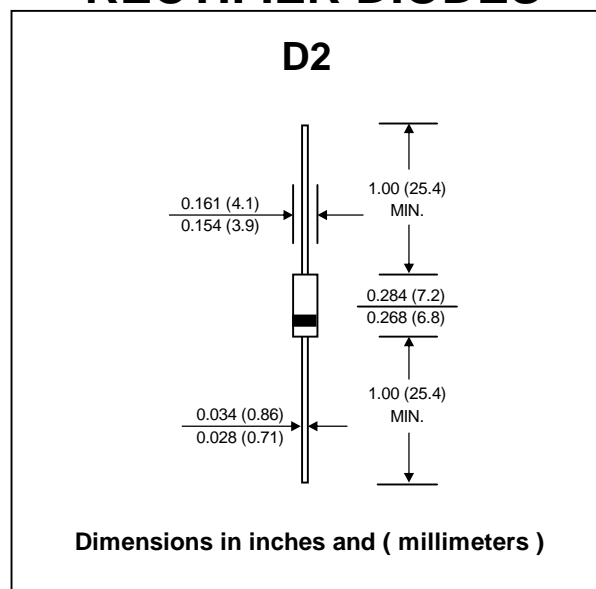
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super fast recovery time
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : D2 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.465 gram

SUPER FAST RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

RATING	SYMBOL	RG10Y	RG10	RG10A	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	70	400	600	V
Maximum RMS Voltage	VRMS	49	280	420	V
Maximum Reverse Voltage	VDC	70	400	600	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	IF(AV)	1.5	1.2	1.0	A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM		50		A
Maximum Peak Forward Voltage at IF = 1.0 A.	VF	1.1	1.8	2.0	V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	IR		5		μA
	IR(H)		50		μA
Maximum Reverse Recovery Time (Note 1)	Trr		35		ns
Typical Junction Capacitance (Note 2)	CJ		50		pf
Junction Temperature Range	TJ		- 65 to + 150		°C
Storage Temperature Range	TSTG		- 65 to + 150		°C

Notes :

(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

RATING AND CHARACTERISTIC CURVES (RG10 - RG10Y)

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

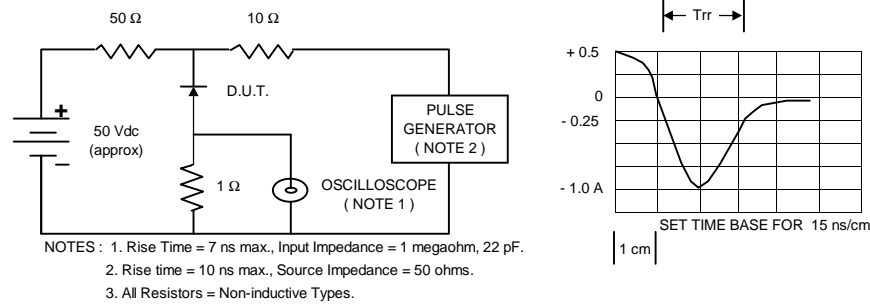


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

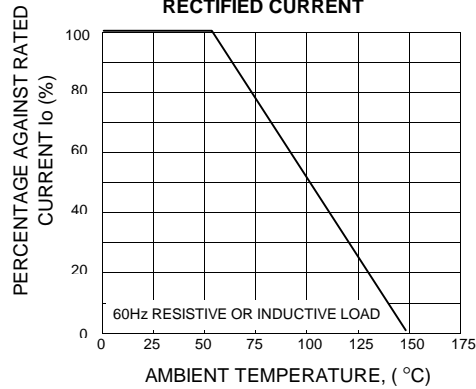


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

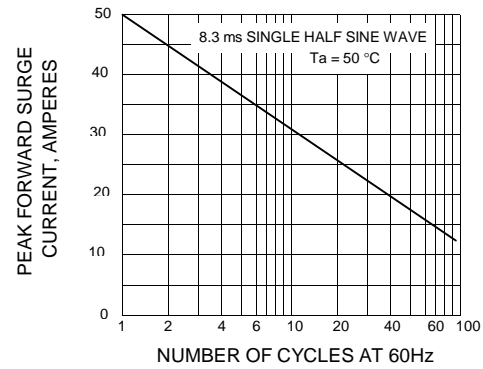


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

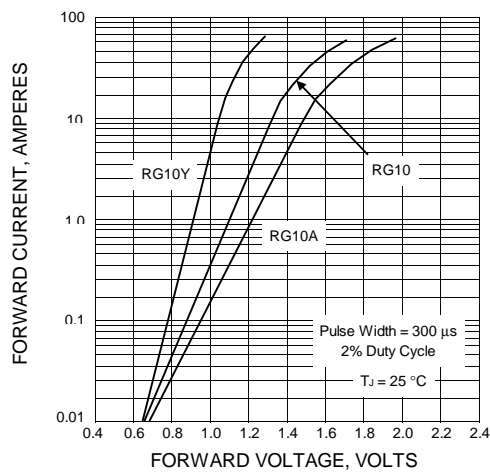


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

