

RG10 - RG10Y

SUPER FAST RECTIFIER DIODES

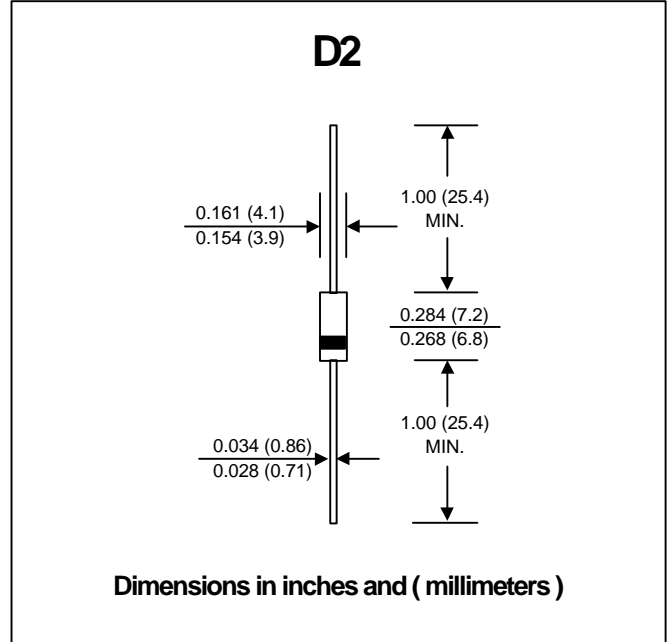
PRV : 70 - 600 Volts
Io : 1.0 - 1.5 Amperes

FEATURES :

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

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



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	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	70	400	600	Volts
Maximum RMS Voltage	VRMS	49	280	420	Volts
Maximum Reverse Voltage	VDC	70	400	600	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	IF(AV)	1.5	1.2	1.0	Amp.
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM		50		Amps.
Maximum Peak Forward Voltage at IF = 1.0 A.	VF	1.1	1.8	2.0	Volts
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

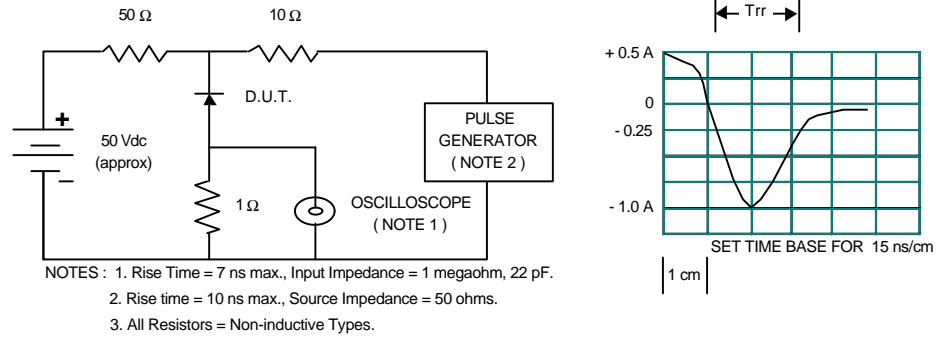


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

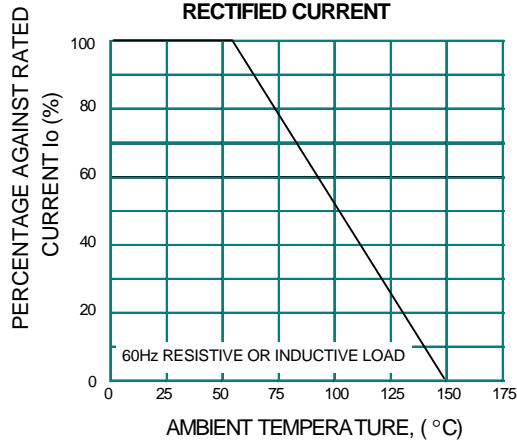


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

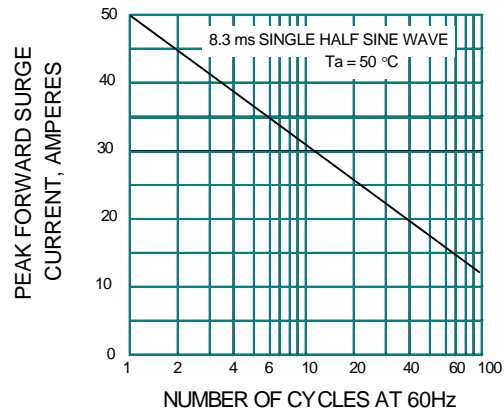


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

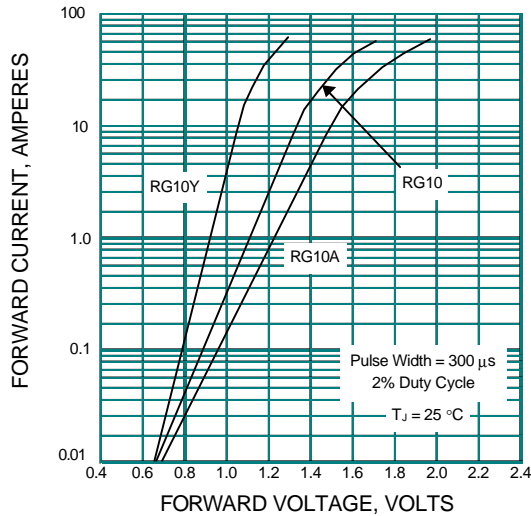


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

