

MP63050

HIGH VOLTAGE ULTRAFAST RECTIFIER DIODE

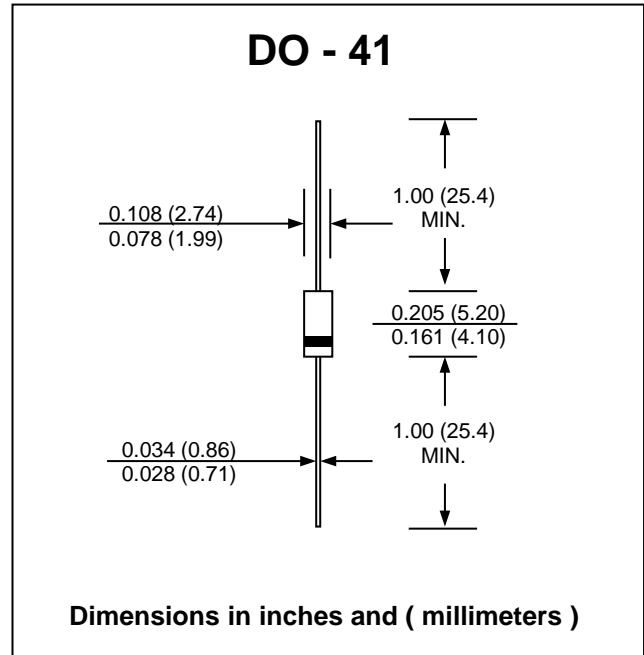
PRV : 3000 Volts
I_o : 0.825 Ampere

FEATURES :

- * Glass passivated junction chip
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb Free / RoHS Compliant**

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.34 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	3000	V
Maximum Average Forward Current Ta = 55 °C	I _{F(AV)}	0.825	A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	30	A
Maximum Peak Forward Voltage at I _F = 0.825 A	V _F	4.5	V
Maximum Reverse Current at V _R = V _{RRM}	I _R	5.0	μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	75	ns
Operating Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	- 65 to + 125	°C

Note :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

RATING AND CHARACTERISTIC CURVES (MP63050)

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

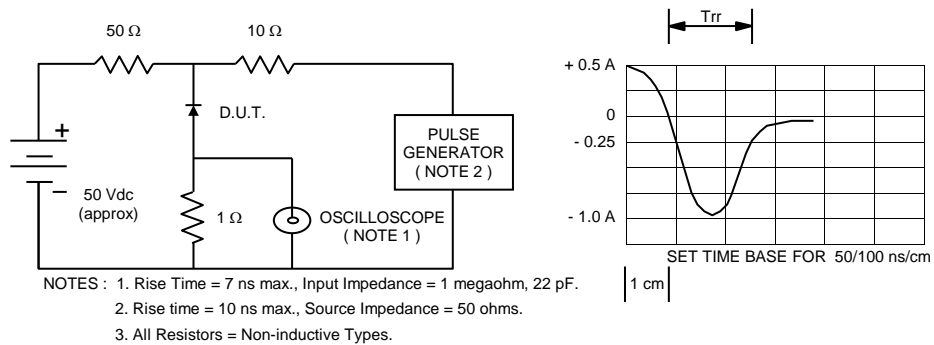


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

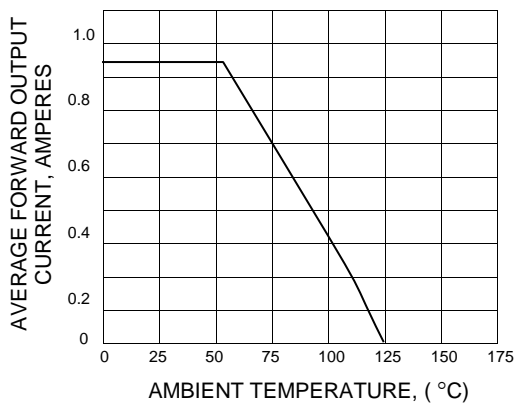


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

