



**SUPER FAST DIODE MODULE TYPE
300A / 400V**

Features

High Surge Capability
Type 400V V_{RRM}

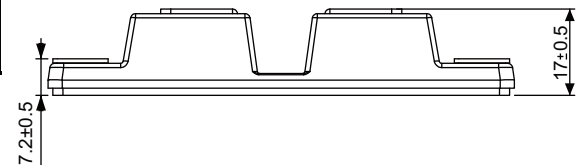
Maximum Ratings

Junction Operating Temperature : -55 °C to+175 °C
Storage Temperature : -55 °C to+175 °C



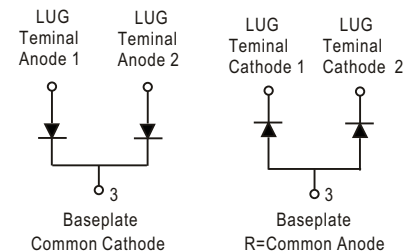
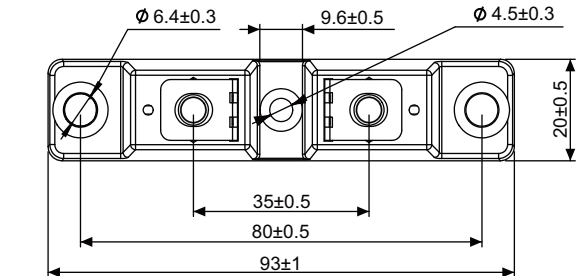
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURQ30040CT(R)	400V	280V	400V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	300A	$T_C = 125\text{ °C}$
Peak Forward Surge Current (Per diode)	I_{FSM}	2600A	8.3ms, half sine
Maximum Instantaneous Forward Voltage * (Per diode)	V_F	Typ. 1.1V Max. 1.3V	$I_{FM} = 150A;$ $T_J = 25\text{ °C}$
Maximum Reverse Current At Rated DC Blocking Voltage (Per diode)	I_R	25µA 3mA	$T_J = 25\text{ °C}$ $T_J = 125\text{ °C}$
Maximum Reverse Recovery Time (Per diode)	T_{rr}	100ns	$I_F=0.5A, I_R=1.0A,$ $I_{RR}=0.25A$
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.40°C/W	
Mounting torque		4 ± 0.5Nm 4 ± 0.5Nm	To heatsink To terminals



*Pulse Test: Pulse Width 300 µsec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

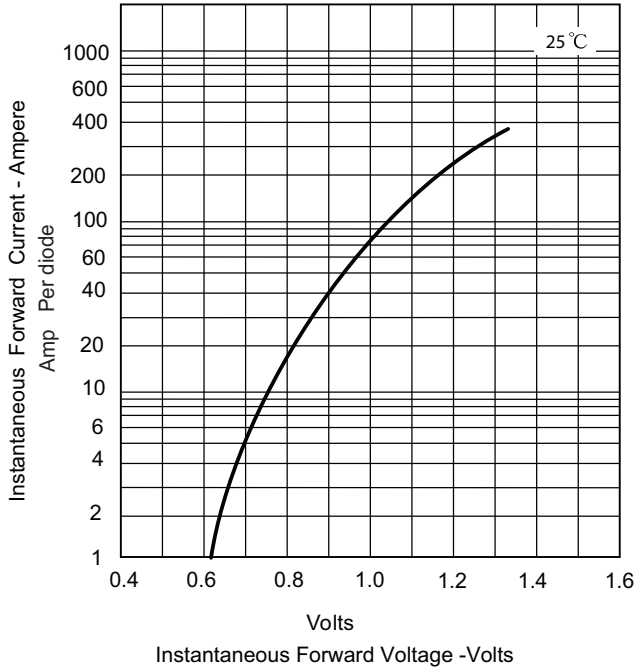


Figure .2- Forward Derating Curve

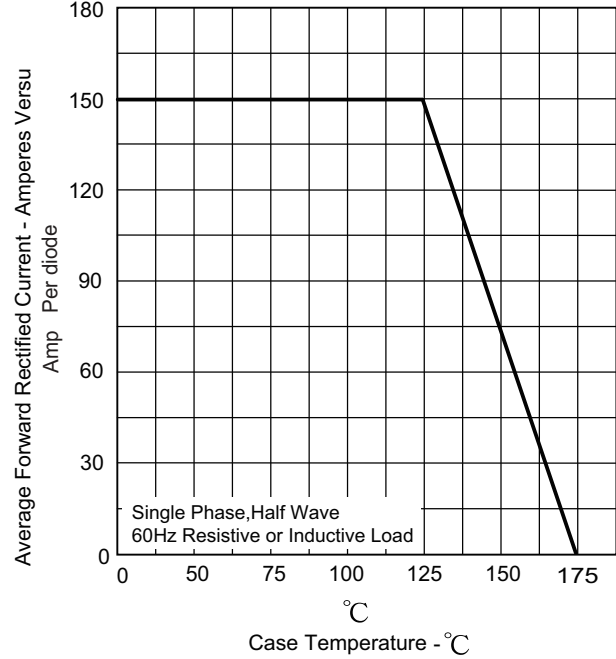


Figure.3- Peak Forward Surge Current

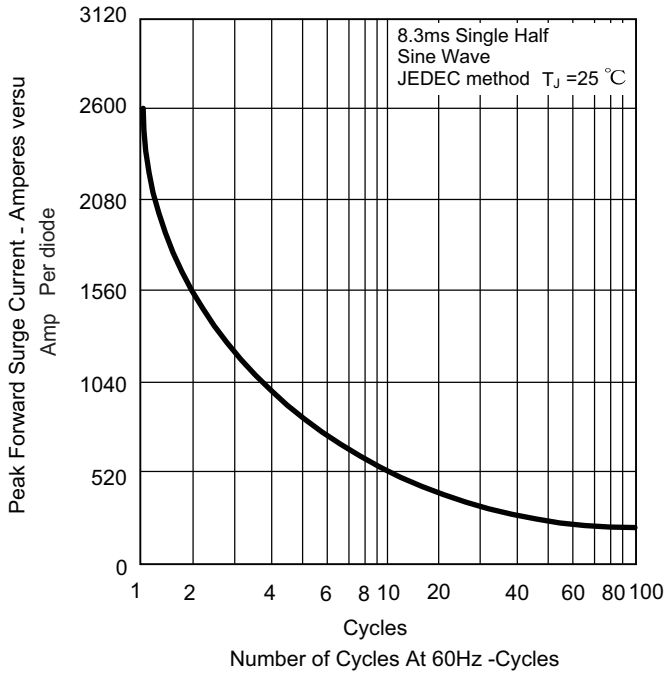
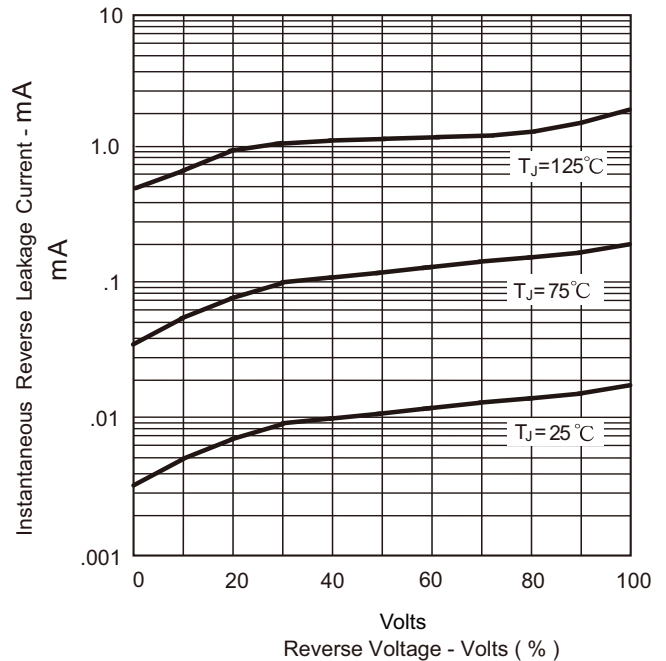


Figure .4-Typical Reverse Characteristics





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