



**SUPER FAST DIODE MODULE TYPE  
400A / 200V**

**Features**

High Surge Capability  
Type 200V  $V_{RRM}$

**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
MURQ40020CT(R)	200V	140V	200V

**Electrical Characteristics @ 25 °C Unless Otherwise Specified**

Item	Symbol	Rating	Conditions
Average Forward Current (Per pkg)	$I_{F(AV)}$	400 A	$T_C = 125^\circ C$
Peak Forward Surge Current (Per diode)	$I_{FSM}$	3800 A	8.3ms , half sine
Mounting torque		4 ± 0.5Nm 4 ± 0.5Nm	to heatsink (M6) to terminals (M6)

Item	Symbol	Rating		Conditions
		Typ.	Max	
Maximum (Per diode) Instantaneous Forward Voltage *	$V_F$	0.95V	1.00V	$I_{FM}=200A ; T_J = 25^\circ C$
Maximum (Per diode) Instantaneous Reverse Current At Rated DC Blocking Voltage	$I_R$		25µA 3mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$
Maximum Reverse Recovery Time (Per diode)	$T_{rr}$		150ns	$I_F=0.5A, I_R=1.0A,$ $I_{RR}=0.25A$
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$		0.35°C/W	

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



Dimensions in mm (1 mm = 0.0394")

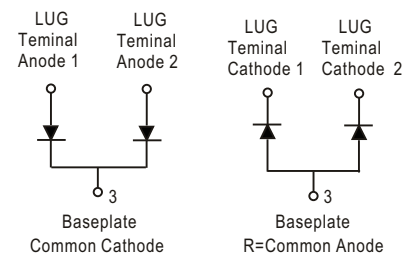
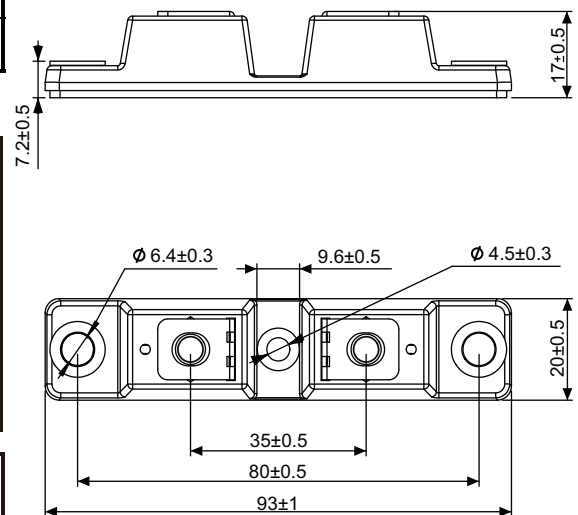




Figure .1- Typical Forward Characteristics

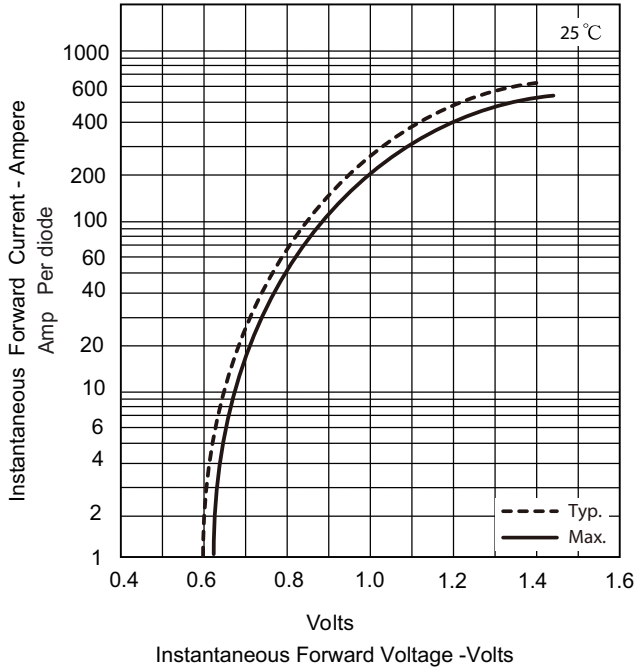


Figure .2- Forward Derating Curve

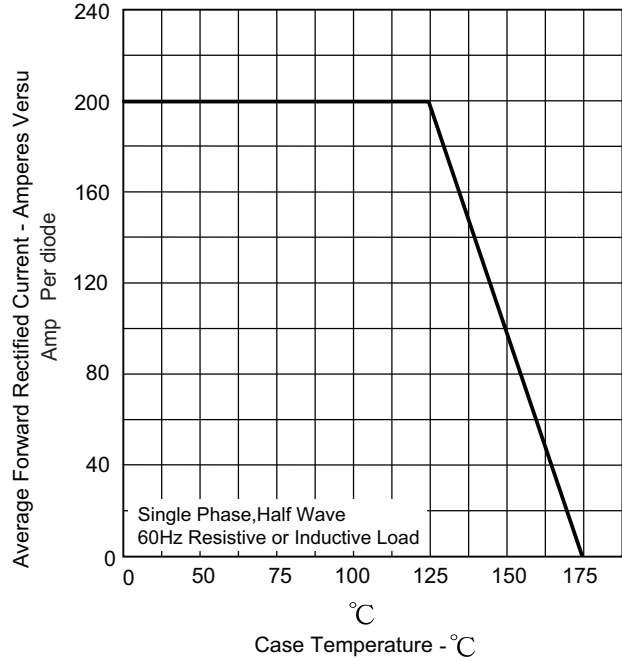


Figure.3- Peak Forward Surge Current

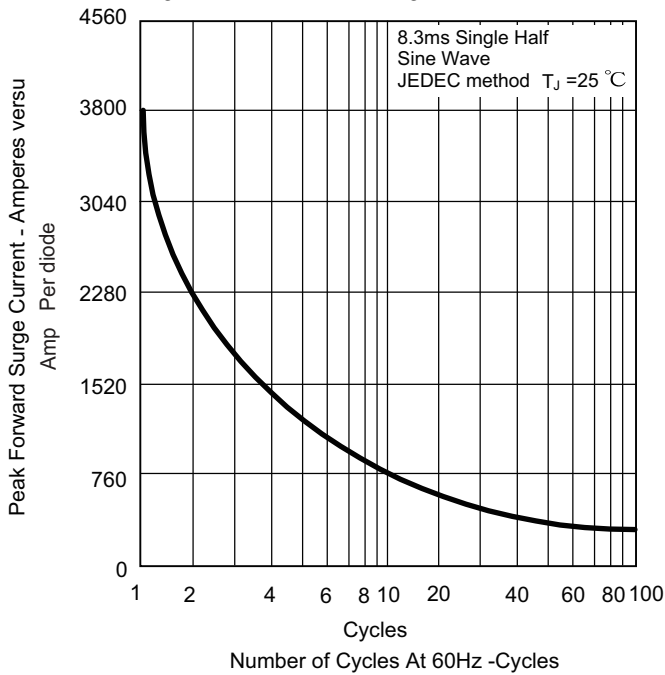
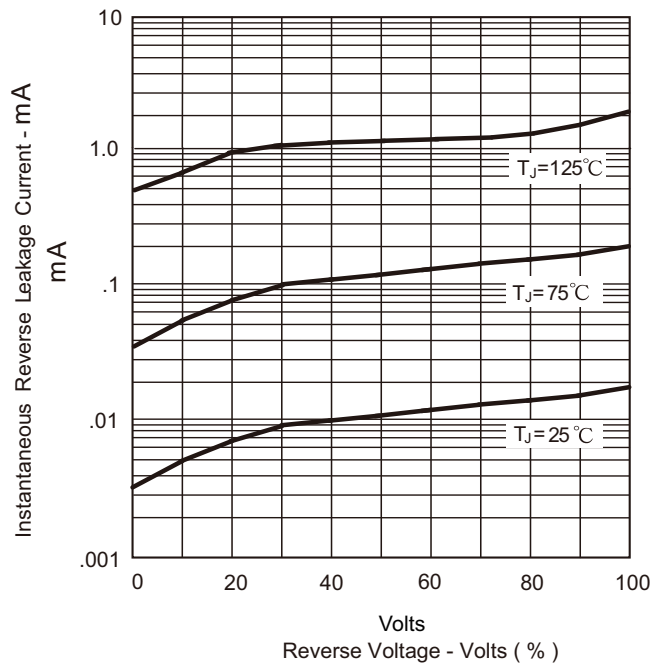


Figure .4-Typical Reverse Characteristics





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