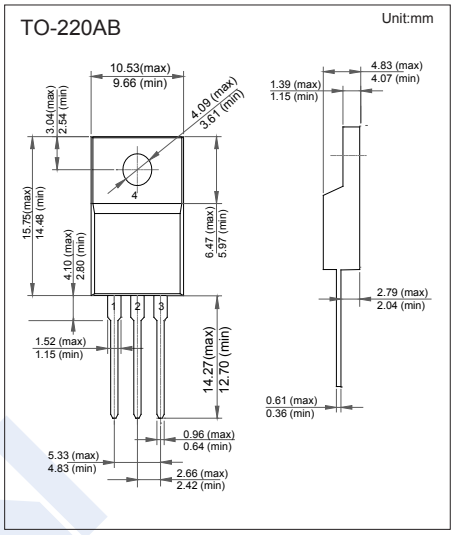
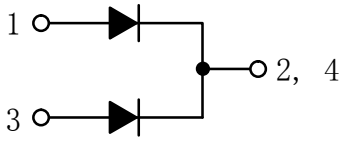
Rectifiers Diodes
MUR1610CT ~ MUR1660CT





■ Features

- Ultrafast 35 and 60 Nanosecond Recovery Times
- 175°C Operating Junction Temperature
- High Temperature Glass Passivated Junction
- High Voltage Capability to 600 V
- Low Leakage Specified @ 150°C Case Temperature
- Current Derating @ Both Case and Ambient Temperatures
- These are Pb−Free Devices

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	MUR 1610CT	MUR 1615CT	MUR 1620CT	MUR 1640CT	MUR 1660CT	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	150	200	400	600	V
Working Peak Reverse Voltage	V_{RWM}						
Maximum DC Blocking Voltage	V_{DC}						
Forward Voltage @ I_F=8A Tc=25℃	V_F	0.975			1.3	1.5	
@ I_F=8A Tc=150℃		0.895			1	1.2	
Averaged Forward Current. Per Leg	I_{FAV}	8					A
@ Tc=150 ℃ Total Device		16					
Peak Rectified Forward Current	I_{FM}	16					
Peak Forward Surge Current @ 60Hz	I_{FSM}	100					
Maximum DC Reverse Current Tc=25℃	I_R	5			10		μA
Tc=125℃		250			500		
Maximum Reverse Current @ I_F = 1A, di/dt = 50A/us	trr	35			60		ns
@ I_F= 0.5A, I_R = 1A, I_{REC} = 0.25A		25			50		
Thermal Resistance, Junction−to−Case	R_{thJC}	3			2		°C/W
Junction Temperature	Tj	175					℃
Storage Temperature	Tstg	-65 to 175					

Note. Pulse Test: Pulse Width = 300us, Duty Cycle ≤ 2.0%

Rectifiers Diodes
MUR1610CT ~ MUR1660CT

■ Typical Characterisitics

MUR1610CT, MUR1615CT, MUR1620CT

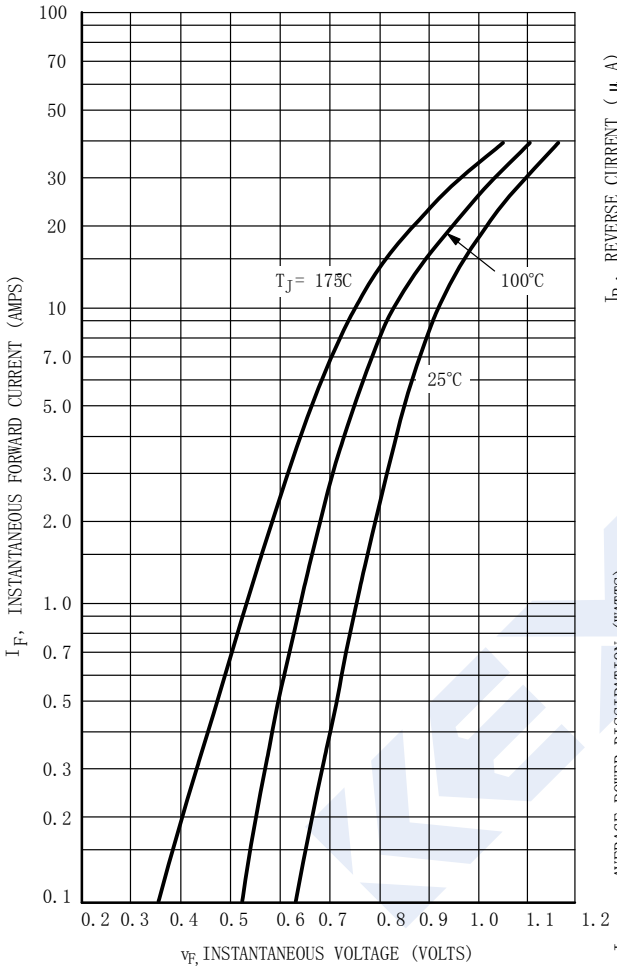


Figure 1. Typical Forward Voltage, Per Leg

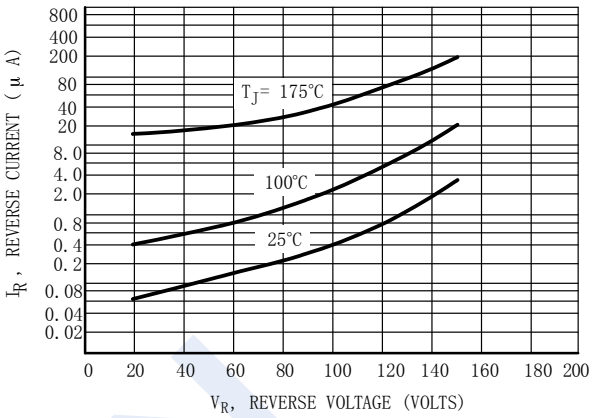


Figure 2. Typical Reverse Current, Per Leg

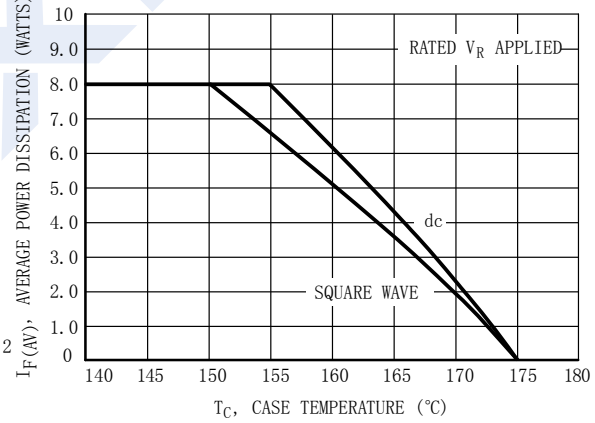


Figure 3. Current Derating, Case, Per Leg

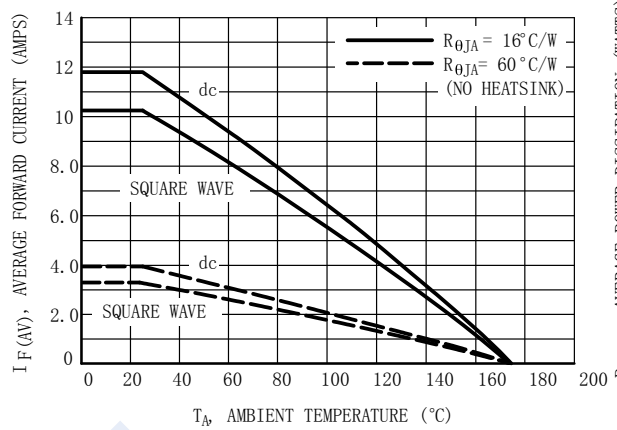


Figure 4. Current Derating, Ambient, Per Leg

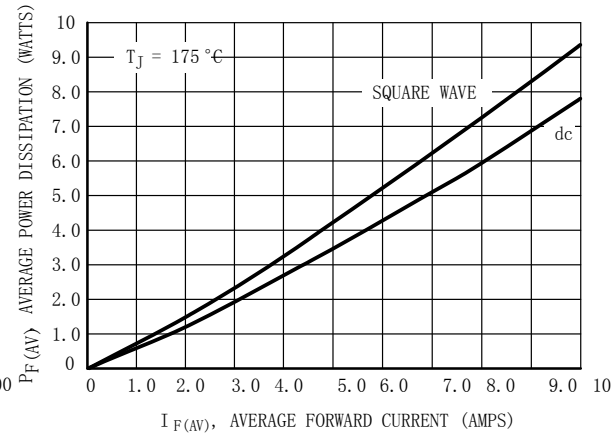


Figure 5. Power Dissipation, Per Leg

Rectifiers Diodes
MUR1610CT ~ MUR1660CT

■ Typical Characterisitics

MUR1640CT

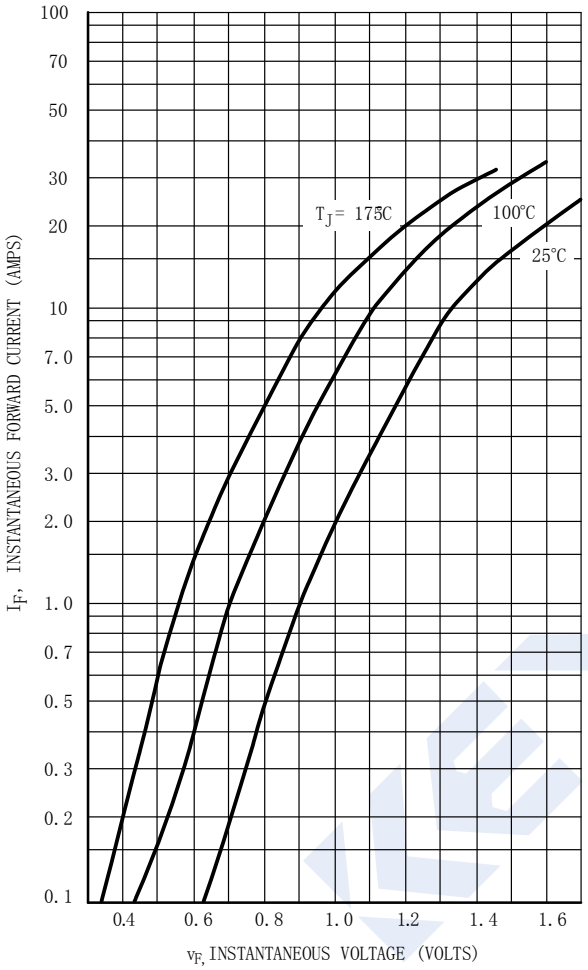


Figure 6. Typical Forward Voltage, Per Leg

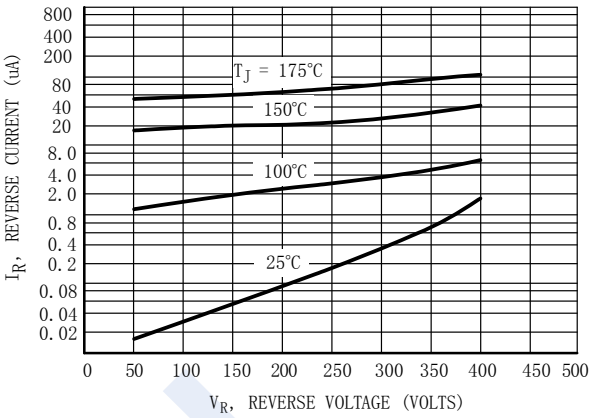


Figure 7. Typical Reverse Current, Per Leg

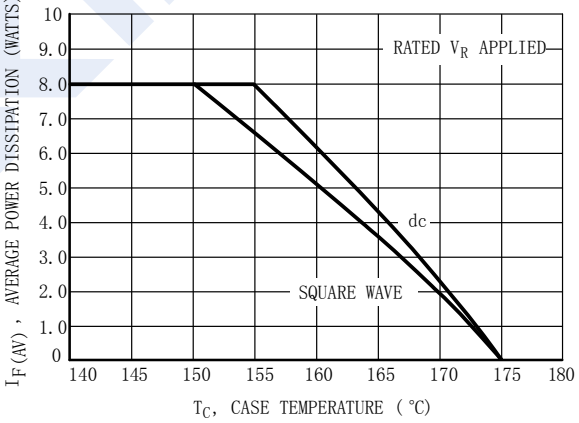


Figure 8. Current Derating, Case, Per Leg

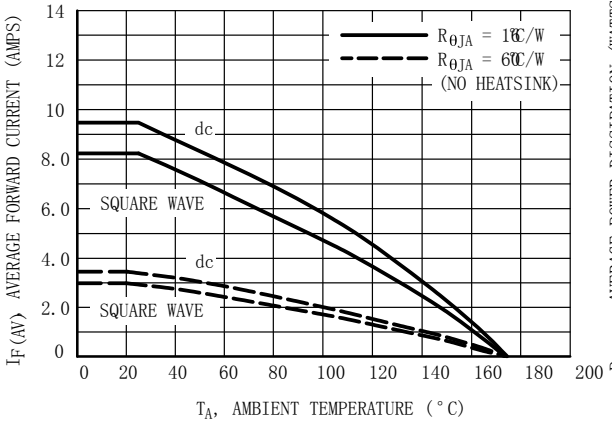


Figure 9. Current Derating, Ambient, Per Leg

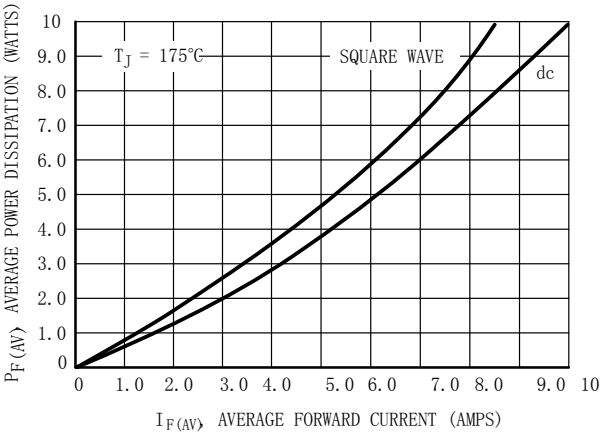


Figure 10. Power Dissipation, Per Leg

Rectifiers Diodes
MUR1610CT ~ MUR1660CT

■ Typical Characterisitics

MUR1660CT

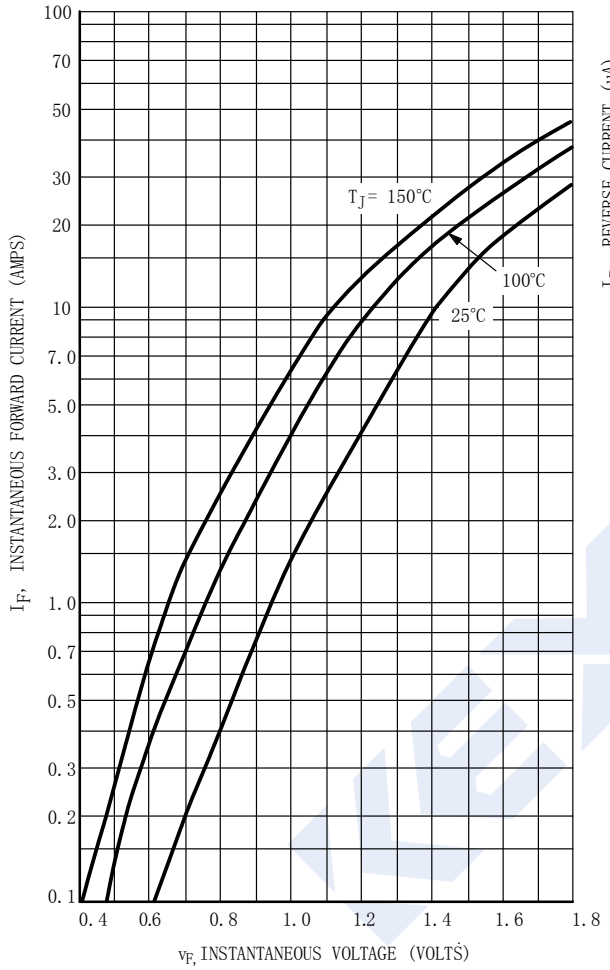


Figure 11. Typical Forward Voltage, Per Leg

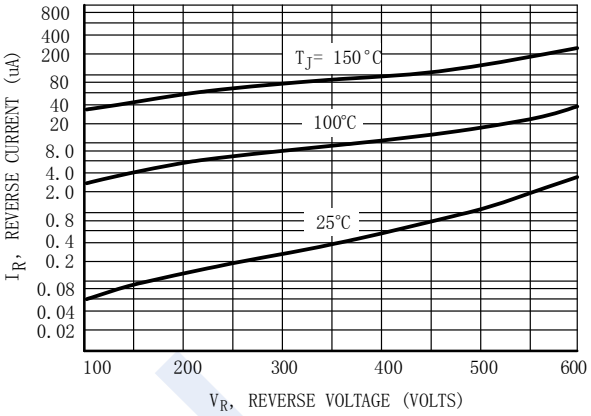


Figure 12. Typical Reverse Current, Per Leg

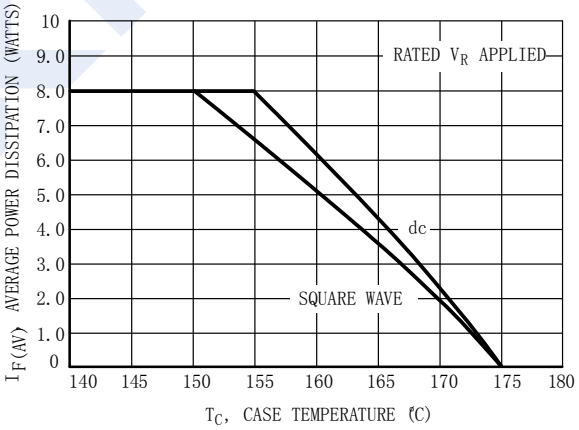


Figure 13. Current Derating, Case, Per Leg

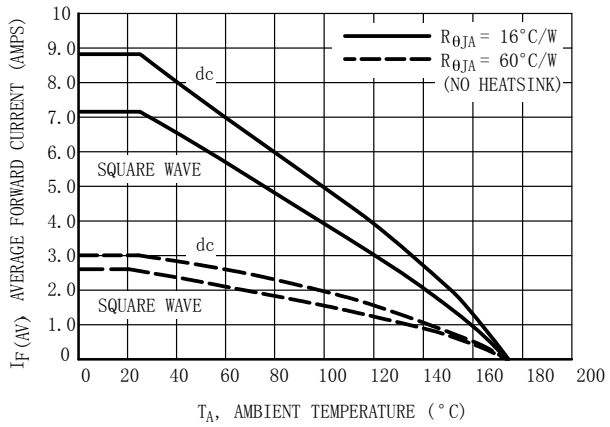


Figure 14. Current Derating, Ambient, Per Leg

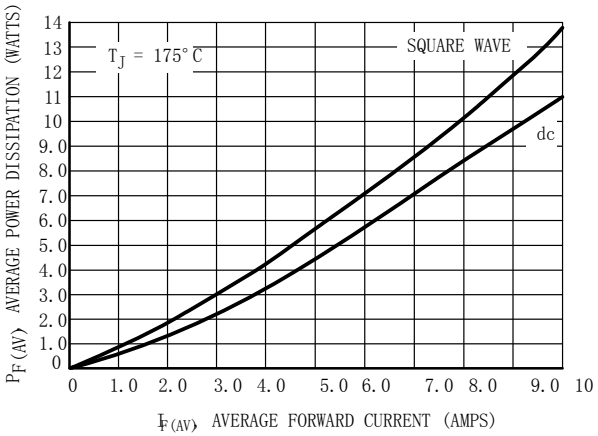


Figure 15. Power Dissipation, Per Leg

Rectifiers Diodes
MUR1610CT ~ MUR1660CT

■ Typical Characterisitics

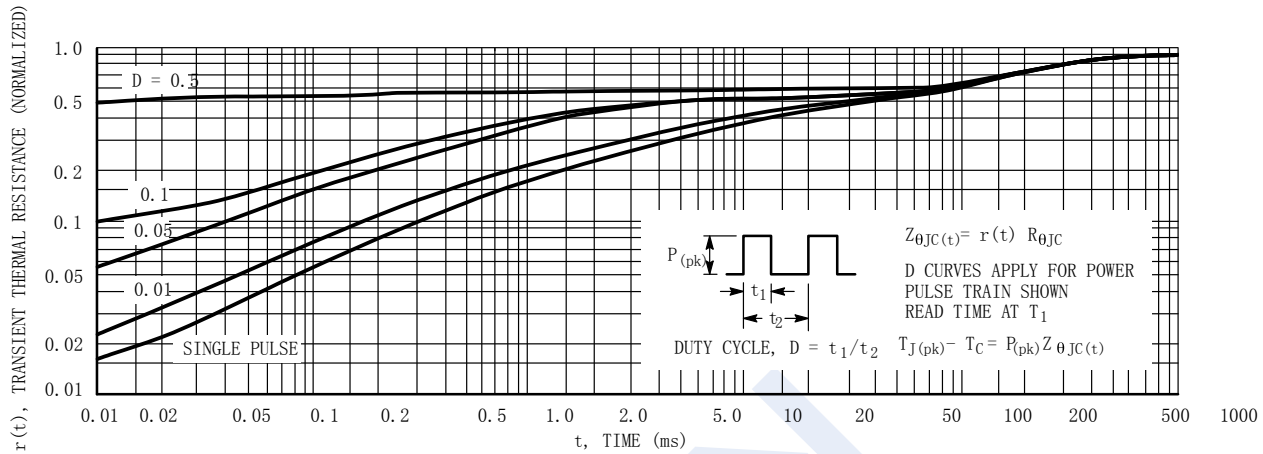


Figure 16. Thermal Response

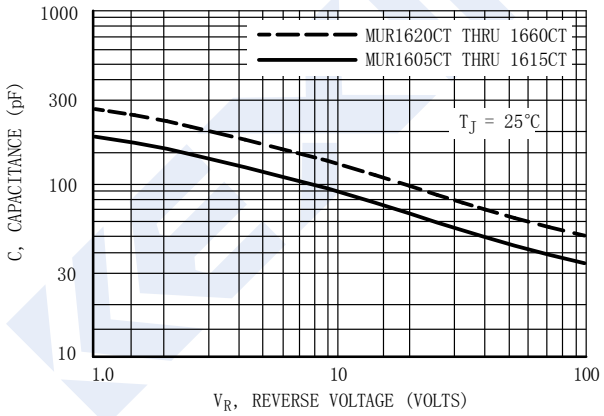


Figure 17. Typical Capacitance, Per Leg