Ultrafast Plastic Rectifiers

MUR1620CT thru MUR1660CT

Reverse Voltage 200V--600 V

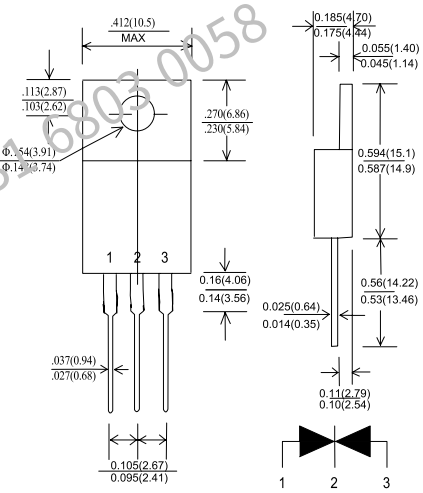
Forward Current(Single) 8.0 A

Formosa MS

Features

- ✧ Ultrafast 35 Nanosecond Recovery times
- ✧ Popular TO-220AB Package
- ✧ Expoxy meets UL94, V0 @ 1/8"
- ✧ High temperature glass passivated junction
- ✧ High voltage capability to 600 volts
- ✧ Low leakage specified @ 150℃ case temperature
- ✧ Current derating @ both case and ambient temperatures
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

TO-220AB



Unit：inch（mm）

Mechanical Data

- ✧ Case: Epoxy, molded
- ✧ Terminal: Pure tin plated, lead free
- ✧ Lead temperature for soldering purposes: 260℃ Max. for 10 seconds
- ✧ Finish: all external surfaces corrosion resistant and terminal leads are readily solderable
- ✧ Weight:1.9 grams

Maximum Ratings and Electrical Characteristics

Rating at 25 ℃ ambient temperature unless otherwise specified.

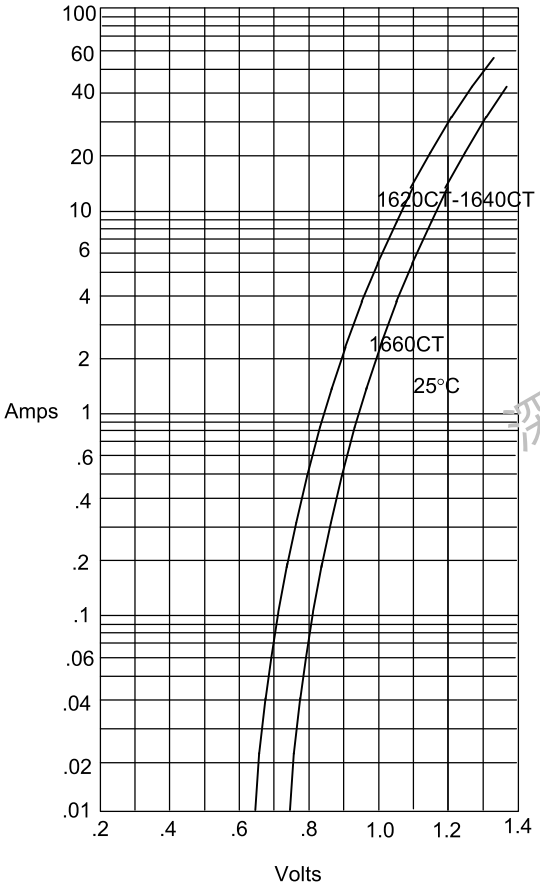
Parameter	Symbol	MUR 1620CT	MUR 1640CT	MUR 1660CT	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	16			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125			A
Maximum Instantaneous Forward Voltage (Note 1) @ I_F=8 A, T_A=25℃	V_F	1.0	1.3	1.7	V
Maximum Reverse Current @ T_A=25 ℃ @ T_A=125 ℃	I_R	5 250	10 500		uA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	35			ns
Typical Thermal Resistance	$R_{\theta JC}$	3.0	2.0		°C/W
Operating Temperature Range	T_J	-55 to + 155			°C
Storage Temperature Range	T_{STG}	-55 to + 155			°C

Note 1: Pulse lest: tp = 300uS, Duty Cycle<1%

Note 2: Reverse Recovery Test Condition:IF=0.5A, IR=1.0A, IRR=0.25A

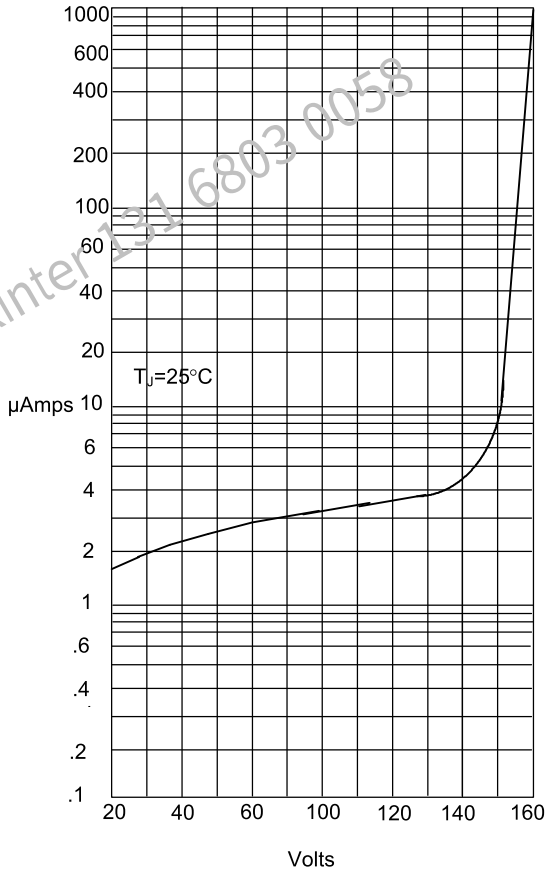
Characteristic Curves

Figure 1
Typical Forward Characteristics



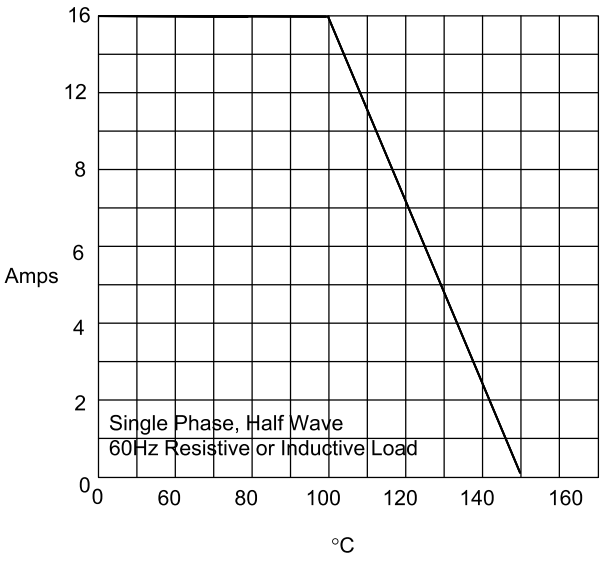
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



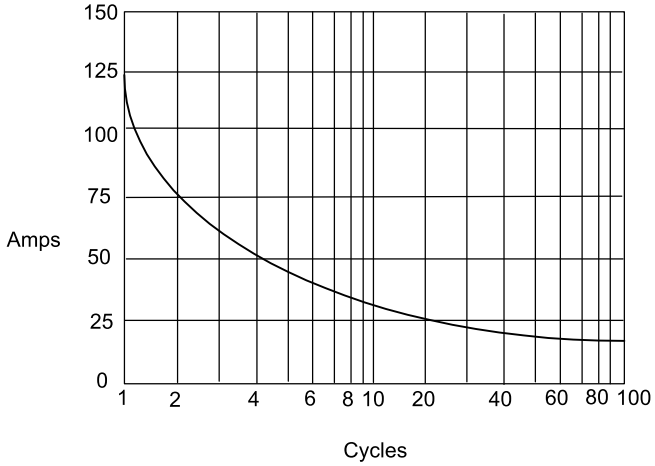
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Case Temperature - °C

Figure 4
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles