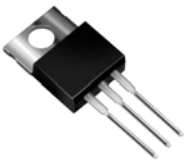
MUR1605CT thru MUR1660CT

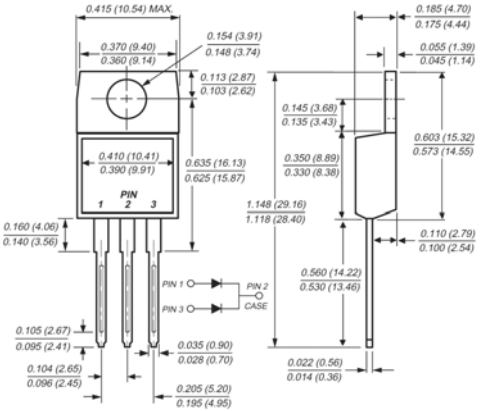
Glass Passivated Super Fast Rectifiers
Reverse Voltage 50 to 600 Volts Forward Current 16.0 Amperes

Features

- Glass passivated junction
- Superfast recovery time for hight efficiency
- Low reverse leakage current
- High surge capacity



TO-220AB



Mechanical Data

- Case: TO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: As marked
- Standard packaging: Any
- Weight: 0.08 ounces, 2.24 grams

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

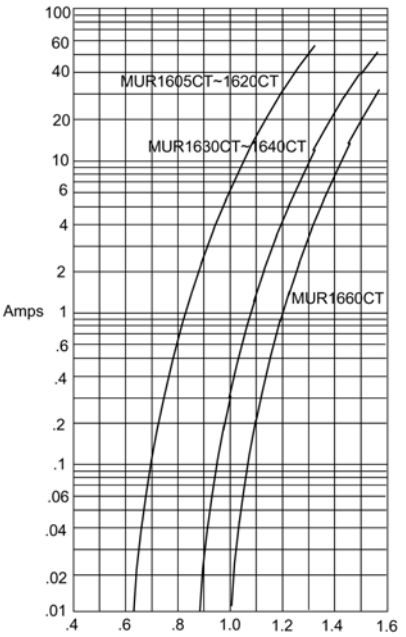
Parameter	Symbol	MUR 1605CT	MUR 1610CT	MUR 1620CT	MUR 1630CT	MUR 1640CT	MUR 1660CT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	Volts
Maximum average forward rectified current at T_C=90°C	$I_{F(AV)}$	16.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	90.0						Amps
Maximum instantaneous forward voltage at 8.0A per element	V_F	0.975			1.3		1.5	Volts
Maximum DC reverse current @T_J=25°C at rated DC blocking voltage @T_J=125°C	I_R	10.0 500						uA
Maximum reverse recovery time at I_F=1.0A, I_R=0.5A, I_{RR}=0.25A	t_{rr}	35				50		nS
Typical junction capacitance at 4.0V, 1MHz	C_J	62						pF
Typical thermal resistance	$R_{\theta JC}$	3.0						°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150						°C

Notes: 1. Pulse test: Pulse width 300 usec, Duty cycle 2%

RATINGS AND CHARACTERISTIC CURVES

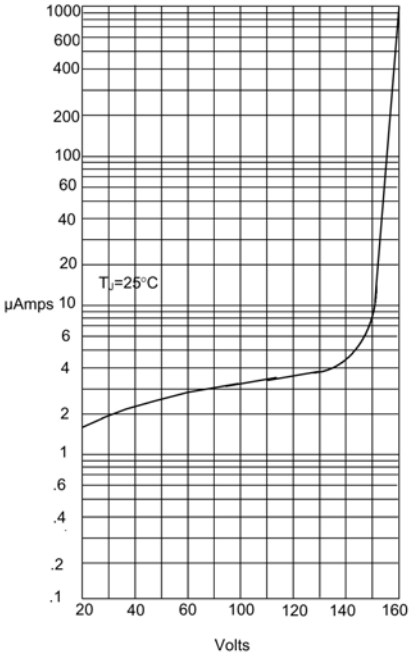
(T_A = 25°C unless otherwise noted)

Figure 1
Typical Forward Characteristics



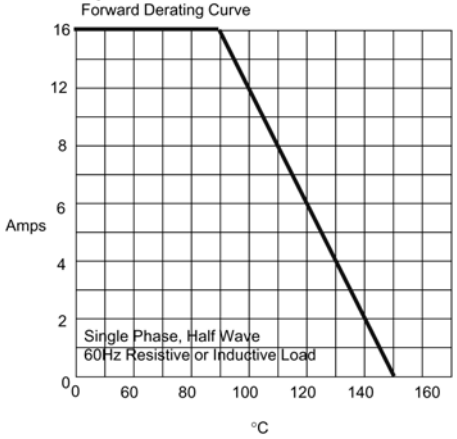
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



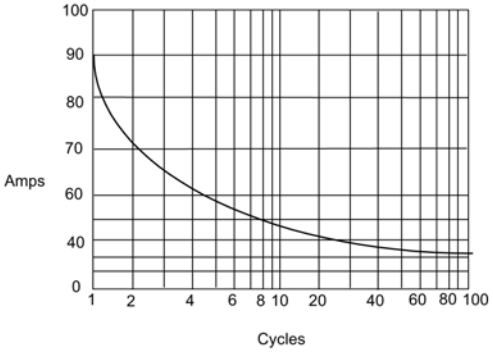
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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