



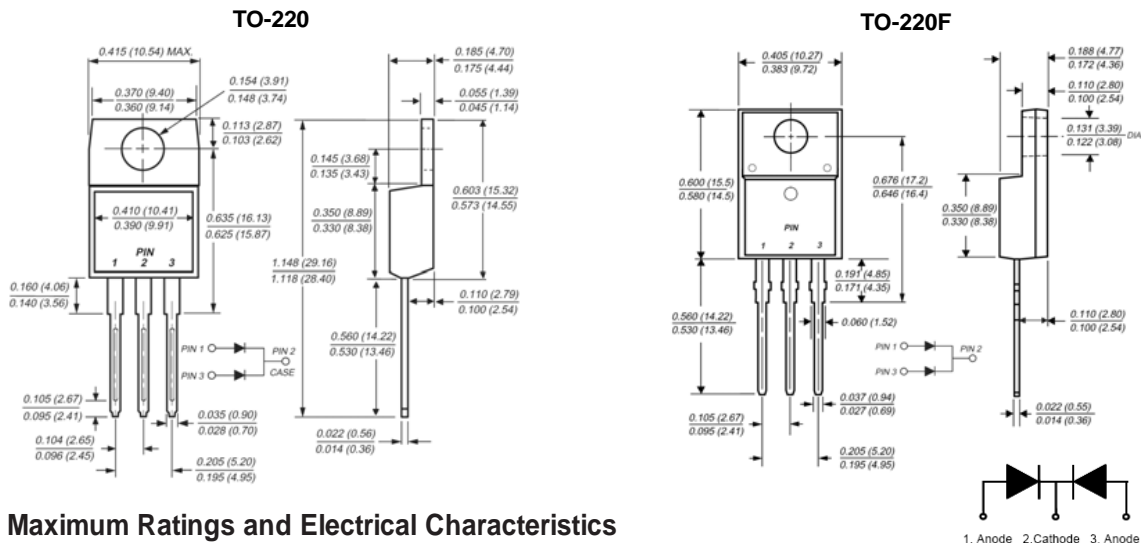
Glass passivated super fast rectifier
Reverse voltage 400 to 600 volts forward current 16 ampers

Features

- ◆ Low power loss, high efficiency
- ◆ Low forward voltage, high current capability
- ◆ High surge capacity
- ◆ Super fast recovery times, high voltage

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	MUR1640CT	MUR1660CT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	Volts
Maximum RMS voltage	V_{RMS}	400	600	Volts
Maximum DC blocking voltage	V_{DC}	400	600	Volts
Maximum average forward rectified current at $T_c=105^\circ\text{C}$	$I_{F(AV)}$	16		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125		Amps
Maximum instantaneous forward voltage at 8.0A per element	V_F	1.3	1.5	Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	50	500	μA
		@ $T_c=25^\circ\text{C}$		
		@ $T_c=100^\circ\text{C}$		
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{tr}=0.25\text{A}$	t_{rr}	50		nS
Typical junction capacitance at 4.0V, 1MHz	C_J	62		pF
Typical thermal resistance	$R_{\theta JC}$	TO-220 : 2 TO-220F : 4		$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$

Note:

1. Screw mounting with 4-40 screw, where washer diameter is $\leq 4.9\text{mm}$ (0.19")
2. Pulse test: 300us pulse width, 1% duty cycle



MUR1640CT thru MUR1060CT MUR1640FCT thru MUR1660FCT

RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

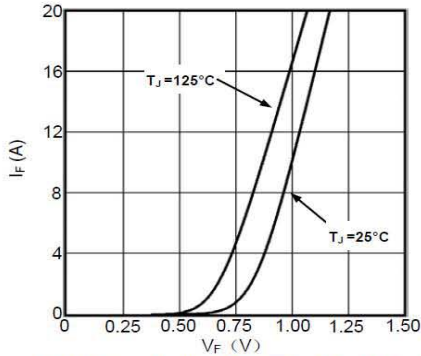


Fig1. Forward Voltage Drop vs Forward Current

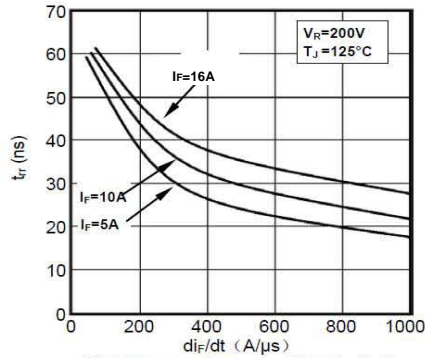


Fig2. Reverse Recovery Time vs di_F/dt

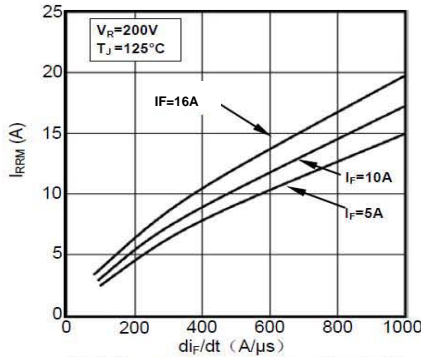


Fig3. Reverse Recovery Current vs di_F/dt

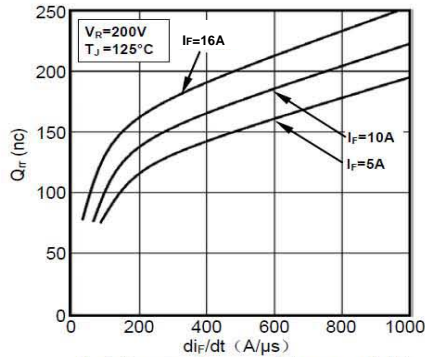


Fig4. Reverse Recovery Charge vs di_F/dt

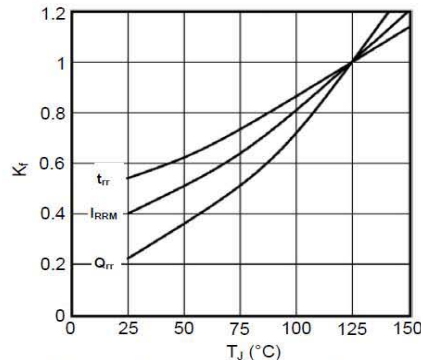


Fig5. Dynamic Parameters vs Junction Temperature

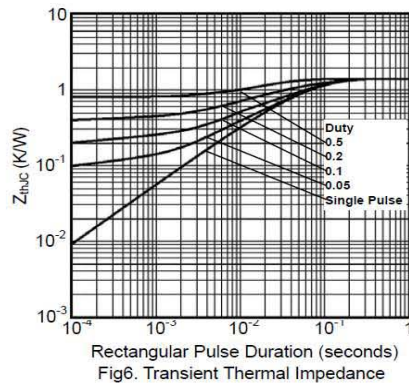


Fig6. Transient Thermal Impedance