

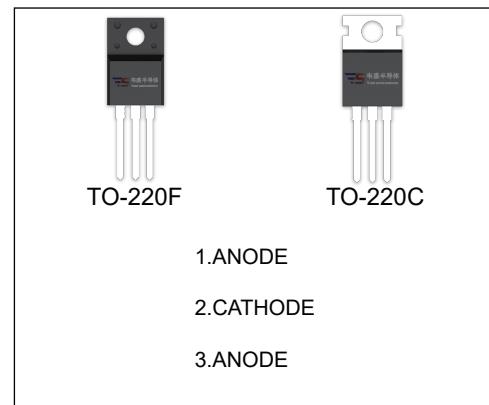
MUR1660CT、MURF1660CT SUPER FAST

MAIN CHARACTERISTICS

I_o	16A
V_{RRM}	600 V
T_j	150 °C
$V_F(\text{typ})$	1.17V (@Tj=125°C)

FEATURES

- Ultrafast 35ns Recovery Times
- High Voltage Capability to 600V
- Low Reverse Leakage Current



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	MUR		Unit
		1660CT	F1660CT	
V_{RRM}	Peak repetitive reverse voltage	600		V
V_{RWM}	Working peak reverse voltage			
V_R	DC blocking voltage			
$V_{R(\text{RMS})}$	RMS reverse voltage	420		V
I_o	Average rectified output current@ Per leg	8		A
	Average rectified output current@ Total device	16		A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	110		A
P_D	Power dissipation	2.0		W
$R_{\Theta JA}$	Thermal resistance from junction to ambient	62.5		°C/W
T_j	Operating Junction Temperature Range	-55 ~ +150		°C
T_{stg}	Storage Temperature Range	-55 ~ +150		°C

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$		600			V
Reverse current	I_R	$V_R=600\text{V}$	$T_j = 25^\circ\text{C}$		0.1	1	μA
			$T_j = 125^\circ\text{C}$		2.0		μA
Forward voltage	V_F	$I_F=8.0\text{A}$	$T_j = 25^\circ\text{C}$		1.35	1.6	V
			$T_j = 125^\circ\text{C}$		1.17		V
Typical total capacitance	C_{tot}	$V_R=4.0\text{V}, f=1\text{MHz}$			28		pF
Reverse recovery time	t_{rr}	$I_F= 0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$				35	ns

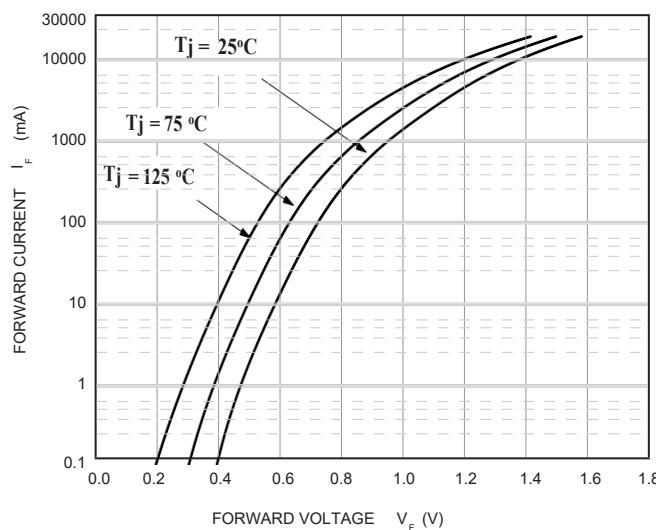
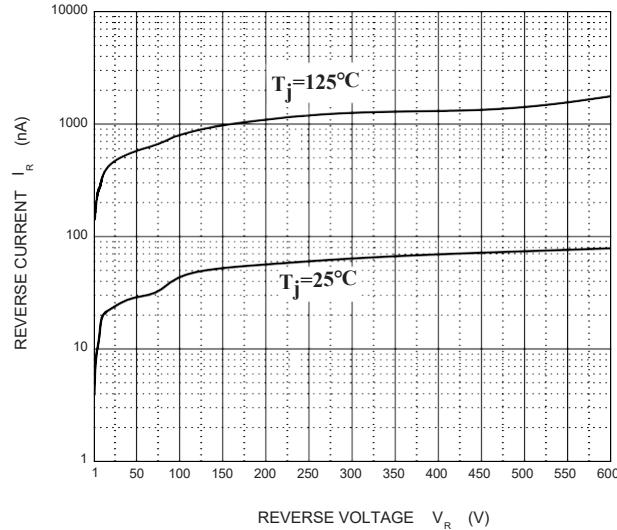
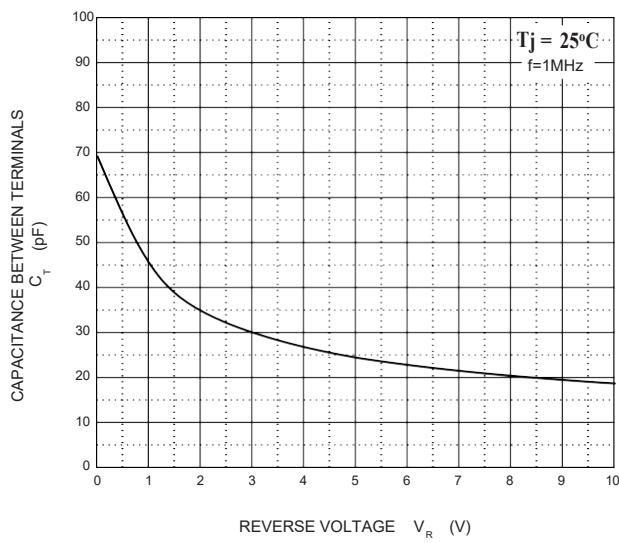
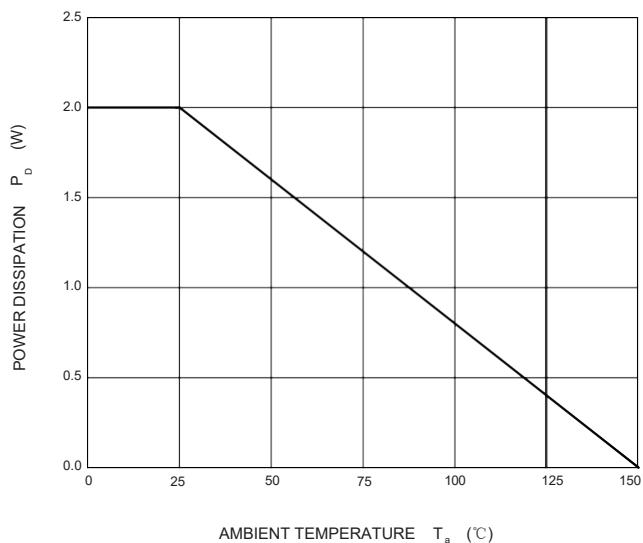
Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve


Diagram of circuit and Testing wave form of reverse recovery time

