MUR1640CT、MURF1640CT SUPER FAST

MAIN CHARACTERISTICS

I_O	16A
V_{RRM}	400 V
T_j	150 ℃
$V_{F(typ)}$	1.1V （@Tj=125℃）

TO-220F

TO-220C

1.ANODE

2.CATHODE

3.ANODE

FEATURES

- Ultrafast 35ns Recovery Times
- High Voltage Capability to 400V
- Low Reverse Leakage Current

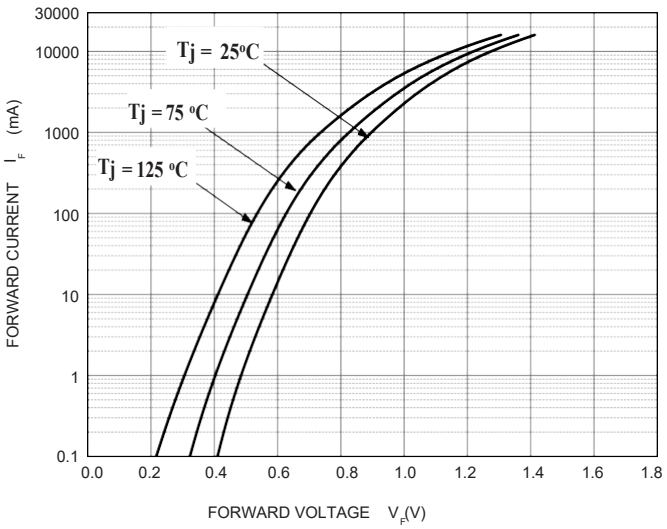
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	MUR		Unit
		1640CT	F1640CT	
V_{RRM}	Peak repetitive reverse voltage	400		V
V_{RWM}	Working peak reverse voltage			
V_R	DC blocking voltage			
$V_{R(RMS)}$	RMS reverse voltage	280		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	120		A
P_D	Power dissipation	2.0		W
$R_{\Theta JA}$	Thermal resistance from junction to ambient	62.5		℃/W
T_j	Operating Junction Temperature Range	-55 ~ +150		℃
T_{stg}	Storage Temperature Range	-55 ~ +150		℃

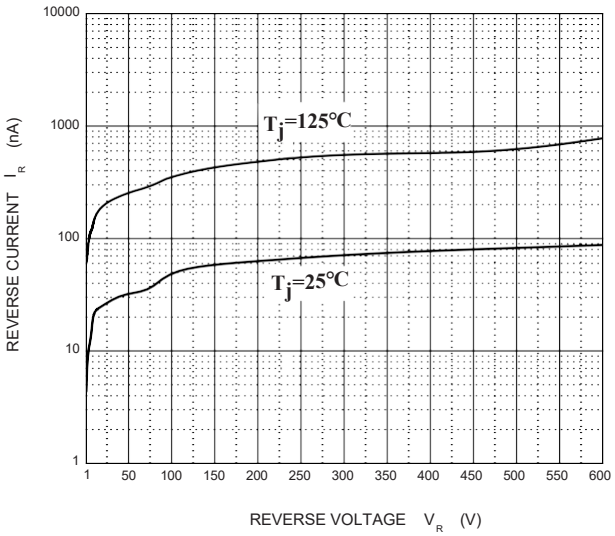
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100uA		400			V
Reverse current	I_R	V_R=400V	Tj =25℃		0.1	1	uA
			Tj =125℃		1.0		uA
Forward voltage	V_F	I_F=8.0A	Tj =25℃		1.22	1.4	V
			Tj =125℃		1.10		V
Typical total capacitance	C_{tot}	V_R=4.0V,f=1MHz			28		pF
Reverse recovery time	t_{rr}	I_F= 0.5A, I_R=1A,I_{rr}=0.25A				35	ns

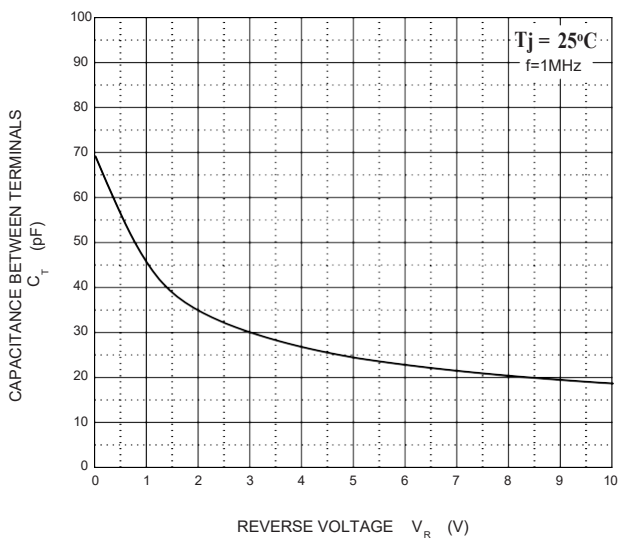
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

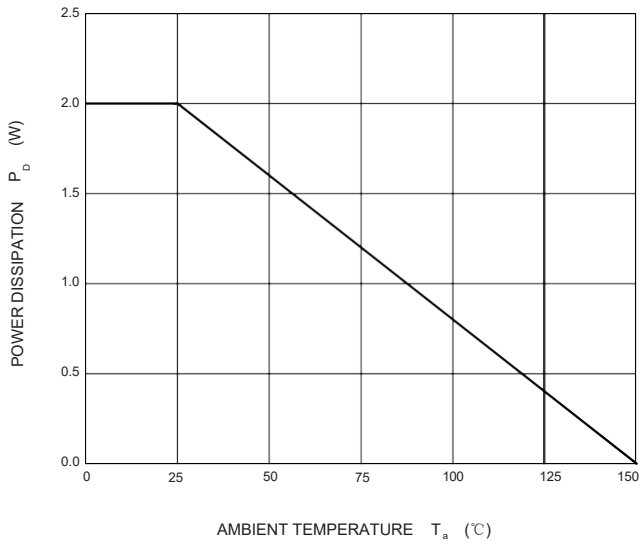


Diagram of circuit and Testing wave form of reverse recovery time