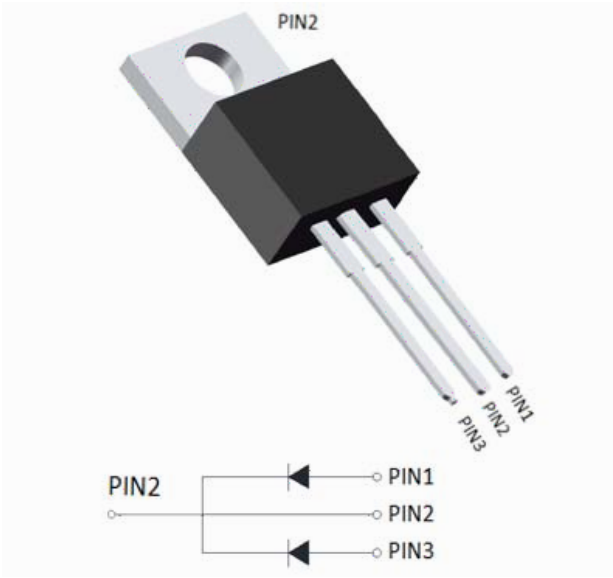
RoHS
COMPLIANT



- Adopt FRED chip
- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

- : TO-220AB
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- : Tin plated leads, solderable per J-STD-002 and JESD22-B102
- : As marked

■ (Tj=25℃ Unless otherwise specified)

Device marking code			MUR1040CT
Repetitive Peak Reverse Voltage	V_{RRM}	V	400
Average Rectified Output Current @60Hz sine wave, R-load, T_C(FIG.1)，Total	I_O	A	10
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Tj=25 , Per leg	I_{FSM}	A	50
Current Squared Time @1ms≤t≤8.3ms Tj=25 ，Per leg	I^2t	A^2s	10
Storage Temperature	Tstg		-55 ~ +175
Junction Temperature	Tj		-55 ~ +175
Typical Junction capacitance @4V,1MHz	Cj	pF	50

■

Instantaneous forward voltage drop, Per leg	V_{FM}	V	I_{FM}=5.0A @Tj=25		-	1.15	1.30
			I_{FM}=5.0A @Tj=150			0.9	1.0
DC reverse current at rated DC blocking voltage	I_{RRM1}	uA	V_{RM}=V_{RRM} Tj=25		-	-	5.0
	I_{RRM2}		V_{RM}=V_{RRM} Tj=150		-	25	100
Reverse Recovery Time,	Trr	ns	I_F=0.5A I_{RM}=1A I_{RR}=0.25A Tj=25		-	25	35
			Tj=25	I_F=5A di/dt=-200A/us V_{RM}=200V	-	29.5	-
			Tj=125		-	46.6	-
Peak recovery current	I_{RRM}	A	Tj=25		-	3.49	-
			Tj=125		-	5.71	-
Reverse recovery charge	Qrr	nC	Tj=25		-	55.22	-
			Tj=125		-	130	-

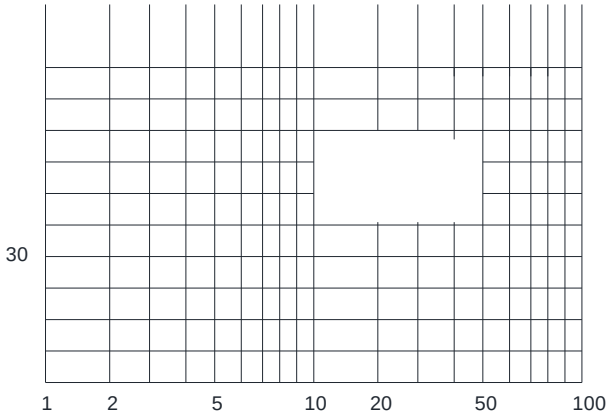
■ （Tj=25℃ Unless otherwise specified）

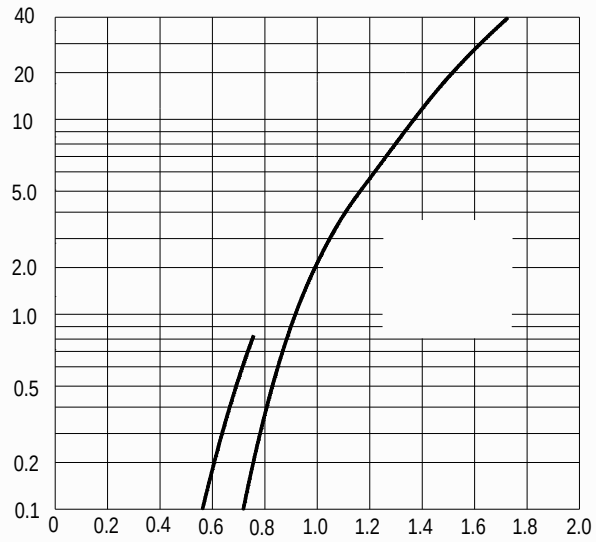
Thermal Resistance	Between junction and case	$R_{\theta J-C}$	/W	2.0
Thermal Resistance	Between junction and Air	$R_{\theta J-A}$	/W	50

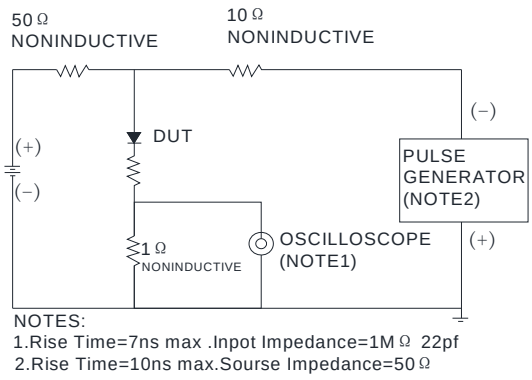
■ (Example)

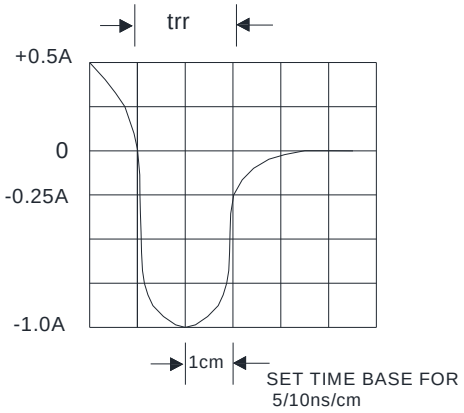
MUR1040CT	Approximate 1.88	50	1000	5000	Tube

■ (Typical)

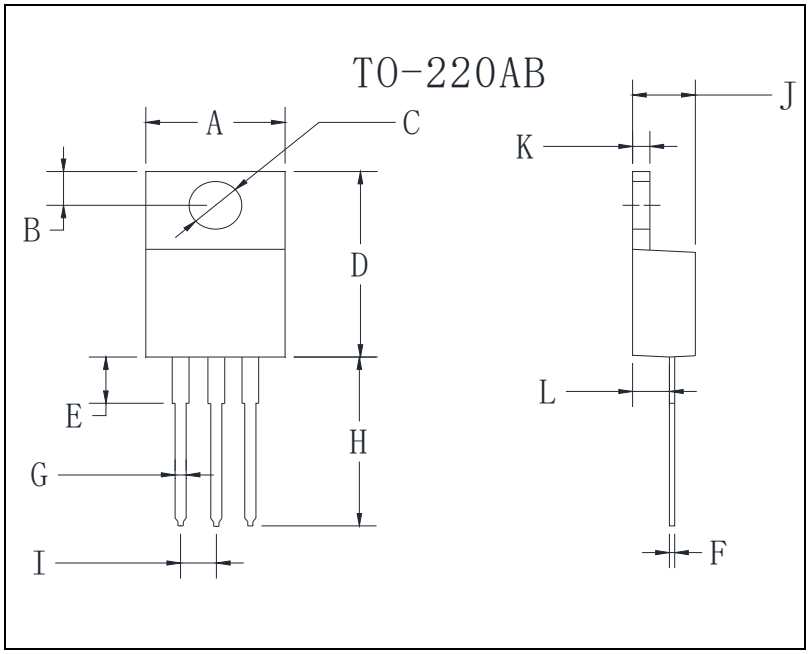



40
20
10
5.0
2.0
1.0
0.5
0.2
0.1
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0


50Ω
NONINDUCTIVE
10Ω
NONINDUCTIVE
(+)
(−)
DUT
(−)
PULSE
GENERATOR
(NOTE2)
(+)
1Ω
NONINDUCTIVE
OSCILLOSCOPE
(NOTE1)
NOTES:
1.Rise Time=7ns max .Inpot Impedance=1MΩ 22pf
2.Rise Time=10ns max.Sourse Impedance=50Ω


trr
+0.5A
0
-0.25A
-1.0A
1cm
SET TIME BASE FOR
5/10ns/cm

■



Dim	Min	Max
A	9.95	10.35
B	2.55	2.95
C	3.8	4.0
D	14.95	15.25
E	3.75	4.25
F	0.26	0.5
G	0.68	0.94
H	13.4	13.9
I	2.35	2.65
J	4.38	4.78
K	1.14	1.4
L	2.37	2.79

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