



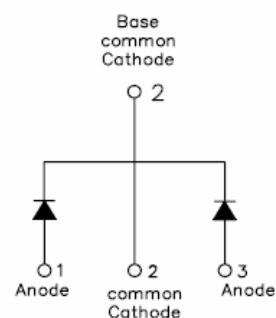
MUR2040CT ULTRAFAST PLASTIC RECTIFIER

Applications:

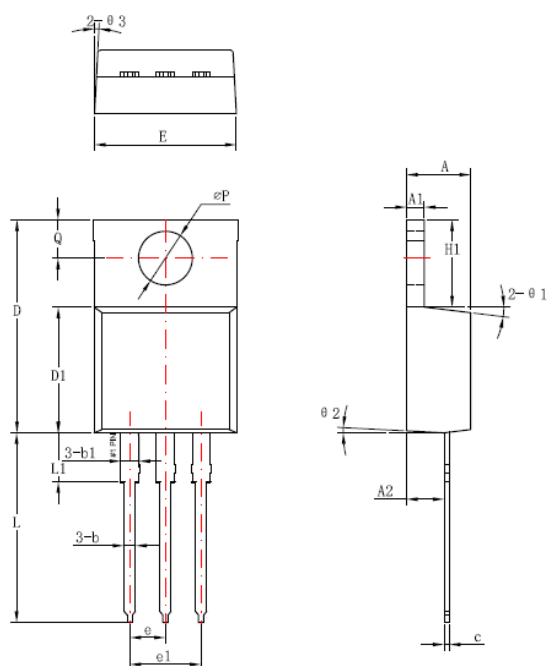
- Switching Power Supply
- Power Switching Circuits
- General Purpose

Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



Mechanical Dimensions: In mm



Symbol	Dimensions in millimeters		
	Min	Typical	Max
A	4.42	4.57	4.72
A1	1.17	1.27	1.37
A2	2.59	2.69	2.89
b	0.71	0.81	0.96
b1		1.27	
c	0.36	0.38	0.61
D	14.94	15.24	15.54
D1	8.85	9.00	9.15
E	10.01	10.16	10.31
e		2.54	
e1		5.06	
H1	6.04	6.24	6.44
L	12.7	13.56	13.78
L1		3.5	
ΦP	3.74	3.84	4.04
Q	2.54	2.74	2.94
θ1		7°	
θ2		3°	
θ3		4°	

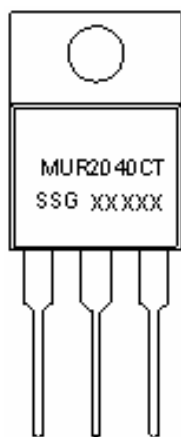
TO-220AB



Technical Data
Data Sheet N0317, Rev. -

Green Products

Marking Diagram:



Where XXXXX is YYWWL

MUR = Device Type
20 = Forward Current (20A)
40 = Reverse Voltage (400V)
CT = Configuration
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
MUR2040CT	TO-220AB (Pb-Free)	50pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	400	V
Max. Average Forward	$I_{O(AV)}$	50% duty cycle @Tc=100°C, rectangular wave form	20	A
Max. Peak One Cycle Non-Repetitive Surge Current (Per leg)	I_{FSM}	50Hz, Half Sine wave	125	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (Per leg)*	V_F	@ $I_F=10A$, Pulse, $T_J = 25^{\circ}C$	1.5	V
Max. Reverse Current (Per leg)*	I_{R1}	@ $V_R = \text{rated } V_R$ $T_J = 25^{\circ}C$	10	μA
	I_{R2}	@ $V_R = \text{rated } V_R$ $T_J = 125^{\circ}C$	500	μA
Max. Reverse Recovery Time (Per leg)*	t_{rr}	$I_F=500mA$, $I_R=1A$, and $I_{rm}=250mA$	35	ns

* Pulse width < 300 μs , duty cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^{\circ}C$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^{\circ}C$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	2	$^{\circ}C/W$
Approximate Weight	wt	-	2	g
Case Style	TO-220AB			



Figure 1
Typical Forward Characteristics

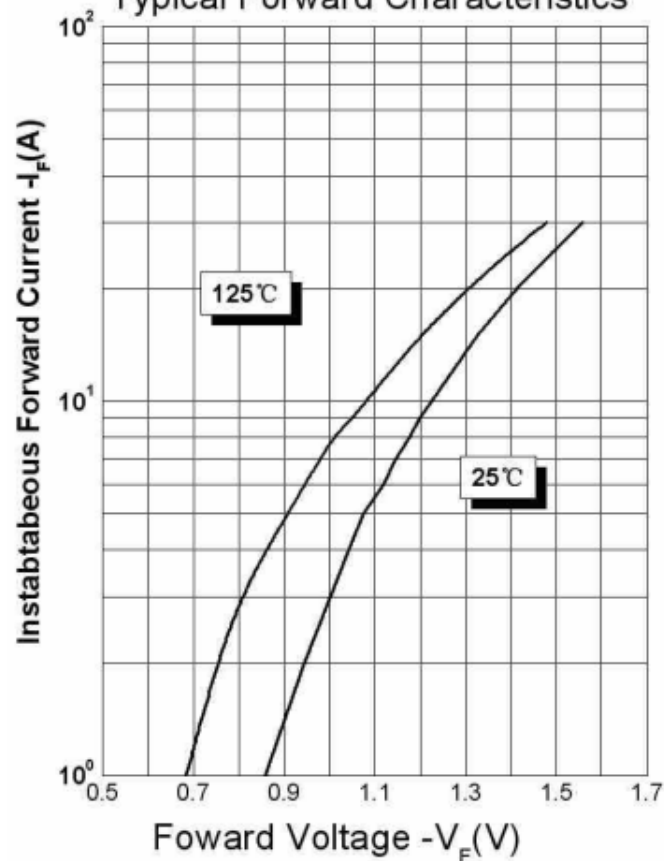


Figure 2
Typical Reverse Characteristics

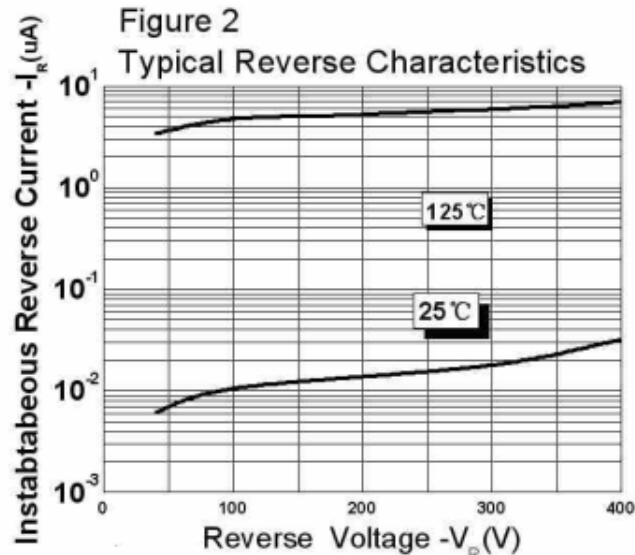
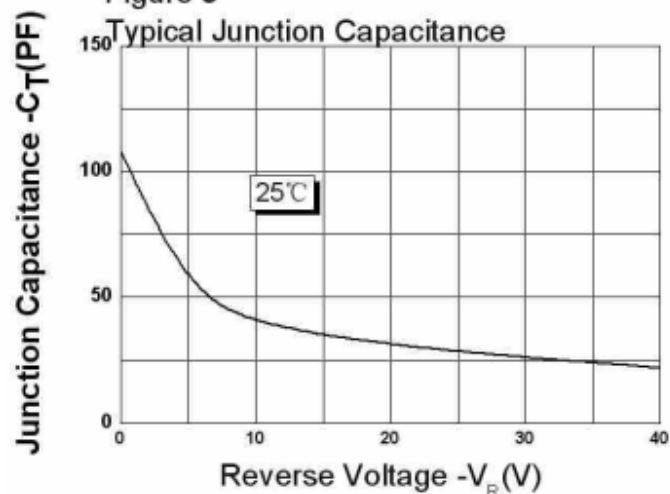


Figure 3
Typical Junction Capacitance





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