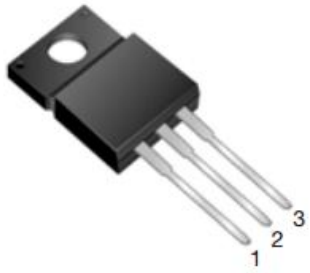
Technical Data
Data Sheet N0353, Rev. A

MURF1640CT ULTRAFAST RECTIFIER

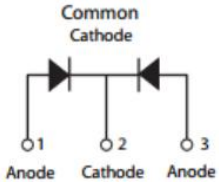


ITO-220AB

Features

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

Circuit Diagram



Applications

- Switching Power Supply
- Power Switching Circuits
- General Purpose

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	-	400	V
Average Rectified Forward Current	$I_{F\ (AV)}$	50% duty cycle @T_C=55°C, rectangular wave form	8(Per Leg) 16(Per Device)	A
Peak One Cycle Non-Repetitive Surge Current(Per Leg)	I_{FSM}	8.3ms, Half Sine pulse	80	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop(Per Leg)*	V_{F1}	@ 8A, Pulse, T_J = 25°C	-	1.3	V
Reverse Current(Per Leg)*	I_{R1}	@V_R = rated V_R, T_J = 25°C	-	10	μA
	I_{R2}	@V_R = rated V_R, T_J = 125°C	-	500	μA
Reverse Recovery Time(Per Leg)	t_{rr}	@I_F=500mA, I_R=1A,and I_{rm}=250mA	-	50	ns
RSM Isolation Voltage (t=1.0 second,R.H.< =30%, T_A =25°C)	V_{iso}	Clip mouting, the epoxy body away from the heatsink edge by more than 0.110"along the lead direction.	-	4500	V
		Clip mouting, the epoxy body is inside the heatsink	-	3500	
		Screw mounting, the epoxy body is inside the heatsink	-	1500	

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

MURF1640CT

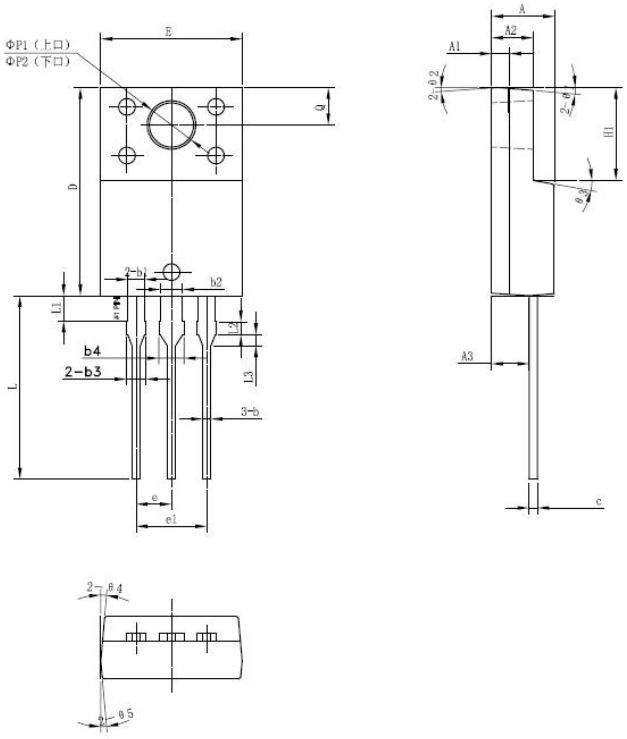
Technical Data
Data Sheet N0353, Rev. A

RoHS

Thermal-Mechanical Specifications:

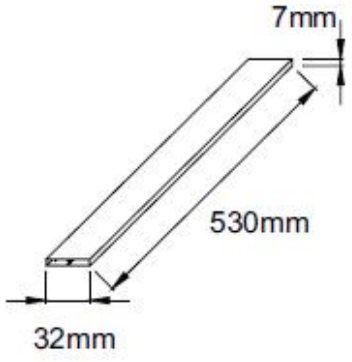
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	°C
Storage Temperature	T_{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	5	°C/W
Approximate Weight	wt	-	2	g
Case Style	ITO-220AB			

Mechanical Dimensions ITO-220AB

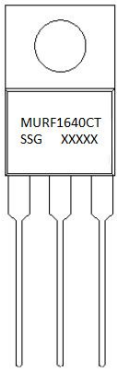


SYMBOL	Millimeters		
	MIN.	TYP.	MAX.
A	4.30	4.50	4.70
A1	1.10	1.30	1.50
A2	2.80	3.00	3.20
A3	2.50	2.70	2.90
b	0.50	0.60	0.75
b1	1.10	1.20	1.35
b2	1.50	1.60	1.75
b3	1.20	1.30	1.45
b4	1.60	1.70	1.85
c	0.50	0.60	0.75
D	14.80	15.00	15.20
E	9.96	10.16	10.36
e		2.55	
e1		5.10	
H1	6.50	6.70	6.90
L	12.70	13.20	13.70
L1	1.60	1.80	2.00
L2	0.80	1.00	1.20
L3	0.60	0.80	1.00
ΦP1(上口)	3.30	3.50	3.70
ΦP2(下口)	2.99	3.19	3.39
Q	2.50	2.70	2.90
Θ1		5°	
Θ2		4°	
Θ3		10°	
Θ4		5°	
Θ5		5°	

Tube Specification



Marking Diagram



Where XXXXX is YYWWL

MUR	= Device Type
F	= Package type
16	= Forward Current (16A)
40	= Reverse Voltage (400V)
CT	= Configuration
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

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

MURF1640CT

Technical Data
Data Sheet N0353, Rev. A

Ordering Information

Device	Package	Shipping
MURF1640CT	ITO-220AB (Pb-Free)	50 pcs/ tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.