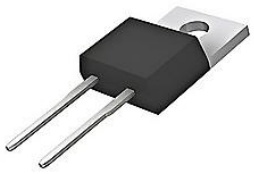
Fast Recovery Rectifier
15A 200~600V TO-220AC

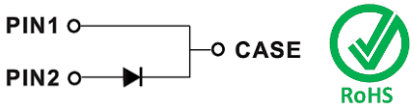
MUR15xx Series

MERITEK

FEATURE

- High Forward Surge Current Capability
- Glass Passivated Chip Junction
- Superfast Recovery Time
- Application: DC to DC Converters, Switching Mode Power Supplies, Inverters, Freewheeling Diodes





MECHANICAL DATA

- Case: TO-220AC Package
- Terminals: Solderable per MIL-STD-202, Method 208

MAXIMUM RATINGS AND THERMAL CHATACTERISTICS

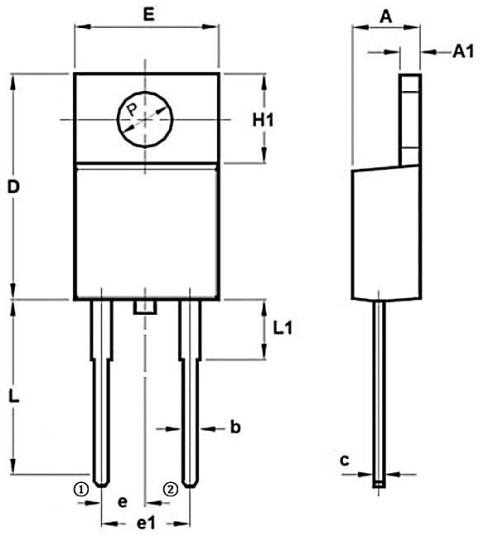
Parameter		Symbol	MUR1520	MUR1540	MUR1560	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	200	400	600	V
Maximum RMS Voltage		V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage		V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	15			A
Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave (JEDEC Method)		I_{FSM}	200			A
Maximum Forward Voltage at I_F =15A		V_F	0.98	1.30	1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J=25°C	I_R	5.0			μA
	T_J=125°C		500			
Maximum Reverse Recovery Time		t_{rr}	50			ns
Thermal Resistance Junction to Case		$R_{\theta JC}$	1.5			°C/W
Operating Junction Temperature Range		T_J	-55 ~ +150			˚C
Storage Temperature Range		T_{STG}	-65 ~ +175			˚C

Notes:
1. Ratings at 25˚C ambient temperatures unless otherwise specified.
2. Reverse recovery time test condition: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

DIMENSIONS

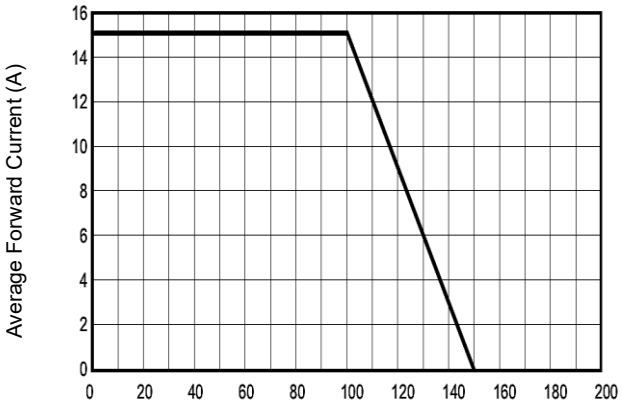
Item	Min (mm)	Max (mm)
A	4.16	5.00
A1	1.15	1.39
b	0.50	0.96
c	-	0.65
D	13.93	15.87
E	9.85	10.66
e	2.54	
e1	5.08	
H1	5.75	6.85
L	12.70	-
L1	-	4.50
P	3.55	-

Pin Layout: 1:Cathode, 2:Anode

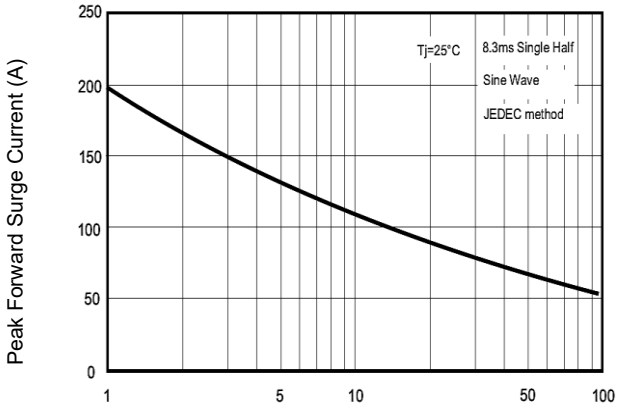


CHARACTERISTIC CURVES

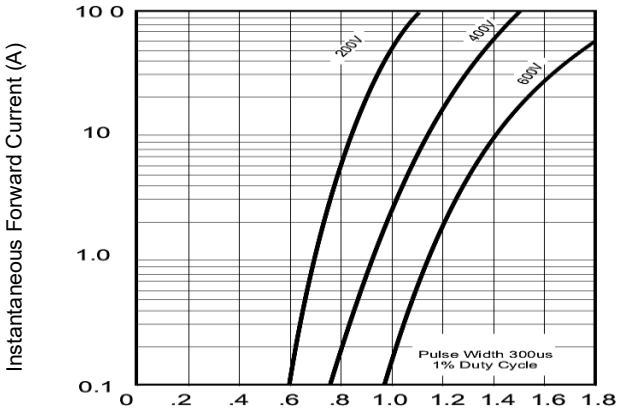
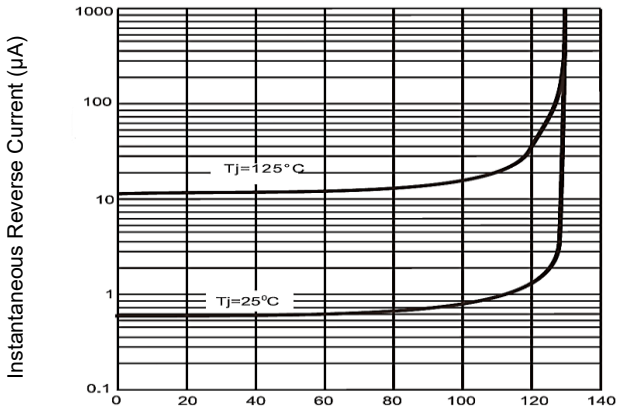
Typical Forward Current Derating Curve



Maximum Non-Repetitive Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics