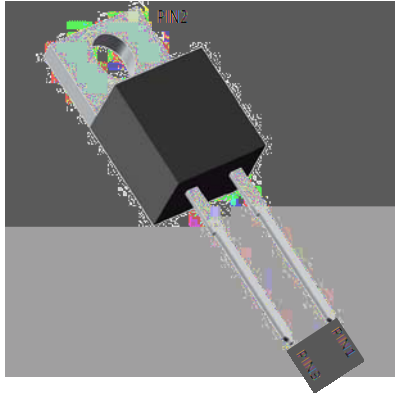


Ultra-Fast Recovery Diodes 16A FRED



Features

- 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

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

Mechanical Data

Package: TO-220AC

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Dimensions: 4.0 D, i a d

	SYMBOL	UNIT	MUR1660
Device marking code			MUR1660
Repetitive Peak Reverse Voltage	V_{RRM}	V	600
Average Rectified Output Current @60Hz sine wave, R-load, Tc(FIG.1)	I_o	A	16
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Tj=25	I_{FSM}	A	150
Current Squared Time @1ms t 8.3ms Tj=25	I^2t	A ² s	93
Storage Temperature	T_{stg}		-55 ~ +175
Junction Temperature	T_j		-55 ~ +175
Typical Junction capacitance @4V,1MHz	C_j	pF	98



MUR1660

Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V_{FM}	V	$I_{FM}=16.0A$ @ $T_j=25$	-	1.45	1.6
			$I_{FM}=16.0A$ @ $T_j=150$	-	1.25	1.50
DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	uA	$V_{RM}=V_{RRM}$ $T_j=25$	-	-	5.0
	I_{RRM2}		$V_{RM}=V_{RRM}$ $T_j=150$	-	30	200

Reverse Recovery Time

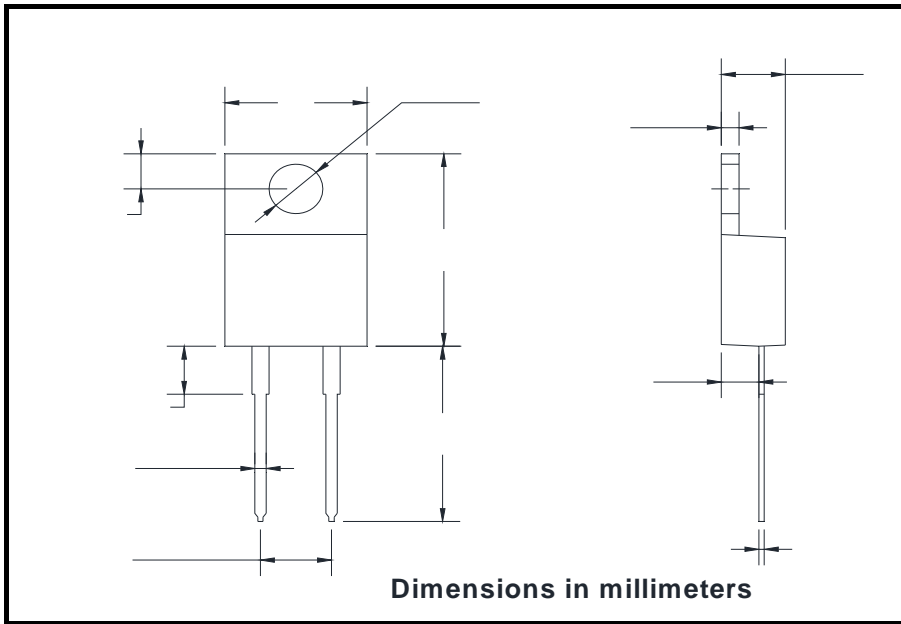
T_{RR}

MUR1660



MUR1660

Outline Dimensions



TO-220AC		
Dim	Min	Max
A	9.95	10.35
B	2.55	2.95
C	3.75	4.05
D	14.95	15.25
E	3.75	4.25
F	0.26	0.5
G	0.68	0.94
H	13.3	13.9
I	4.86	5.26
J	4.38	4.78
K	1.14	1.4
L	2.37	2.79



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