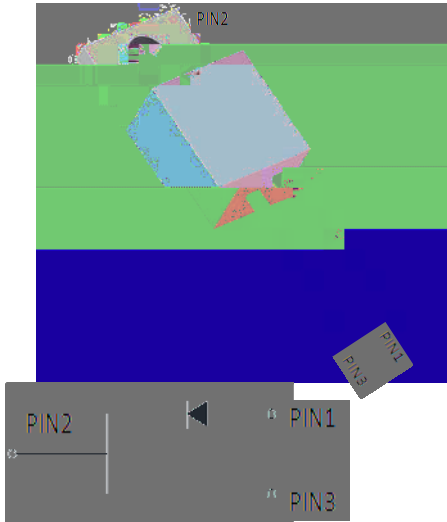


Ultra-Fast Recovery Diodes 15A FRED



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 life
- Integrated leads, solderable per 002 and JESD22-B102
- Polarity:** As marked

Maximum Ratings (T_j=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR1560L
Device marking code			MUR1560L
Repetitive Peak Reverse Voltage	VRRM	V	600
Average Rectified Output Current @60Hz sine wave, R-load, T _c (FIG.1)	I _O	A	15
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _j =25	I _{FSM}	A	150
Current Squared Time @1ms t 8.3ms T _j =25	I ² t	A ² s	93
Storage Temperature	T _{stg}		-55 ~ +175
Junction Temperature	T _j		-55 ~ +175
Typical Junction capacitance @4V,1MHz	C _j	pF	92



MUR1560L

Electrical Characteristics

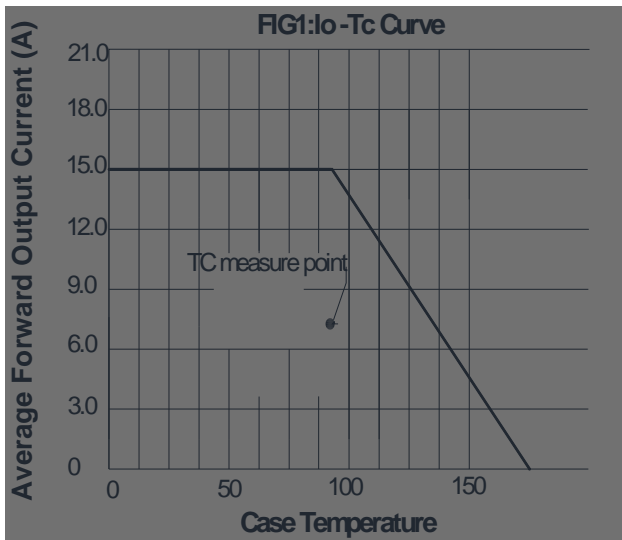
PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max	
Instantaneous forward voltage drop per diode	V_{FM}	V	IFM=15.0A @Tj=25	-	1.9	2.8	
			IFM=15.0A @Tj=150	-	1.5	-	
DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	uA	V _{RM} =V _{VRRM} Tj=25	-	-	10	
	I_{RRM2}		V _{RM} =V _{VRRM} Tj=150	-	30	200	
Reverse Recovery Time	T_{rr}	ns	IF=0.5A IRM=1A IRR=0.25A Tj=25	-	20	25	
			Tj=25	-	37.45	-	
			Tj=125	-	69.15	-	
Peak recovery current	I_{RRM}	A	Tj=25	IF=15A di/dt=-200A/us V _{RM} =200V	-	2.45	-
			Tj=125		-	5.75	-
Reverse recovery charge	Q_{rr}	nC	Tj=25	-	74.62	-	
			Tj=125	-	200.70	-	

Thermal Characteristics Tj=25 Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MUR1560L
Thermal Resistance	Between junction and case	R J-C	/W	2.0
Thermal Resistance	Between junction and Air	R J-A	/W	50 l



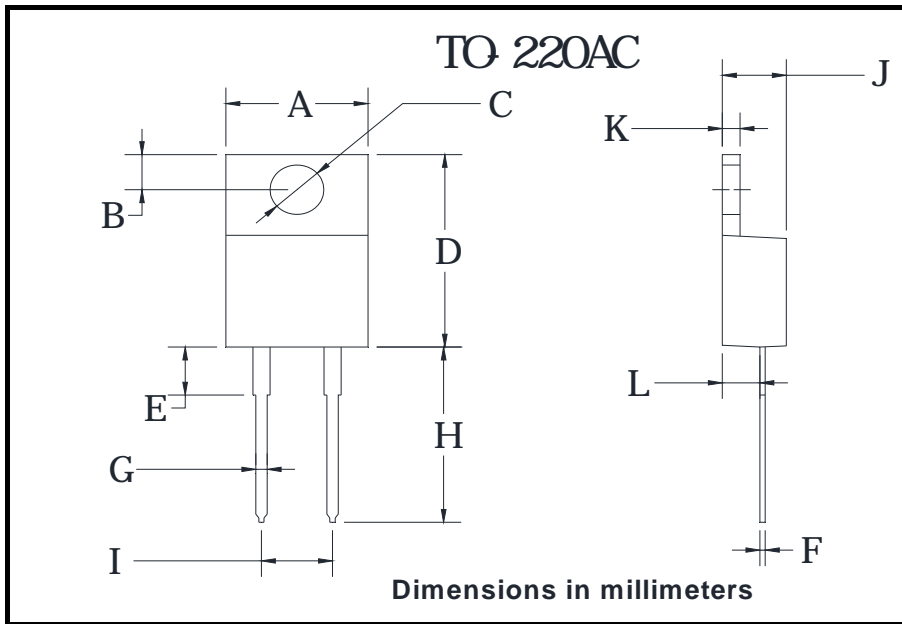
Characteristics (Typical)





MUR1560L

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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