



Features

- Lead Free Finish/RoHS Compliant
- Glass Passivated Chip
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Typical Applications

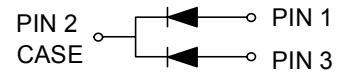
Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data

- **Package:** TO-220
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked



TO-220



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

PARAMETER	SYMBOL	UNIT	1610CT	1615CT	1620CT	1640CT	1660CT
Device marking code			1610CT	1615CT	1620CT	1640CT	1660CT
Repetitive Peak Reverse Voltage	VRRM	V	100	150	200	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	Io	A	18				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave,1 cycle, Ta=25°C	IFSM	A	100				
Storage Temperature	Tstg	°C	-55 ~ +150				
Junction Temperature	Tj	°C	-55 ~ +150				

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1610CT	1615CT	1620CT	1640CT	1660CT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=15A	0.975			1.30	1.50
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	uA	VRM=VRRM Ta=25°C	5			10	
	I _{RRM2}		VRM=VRRM Ta=125°C	250			500	
Reverse Recovery Time	T _{rr}	ns	IF=0.5A I _{RM} =1A I _{RR} =0.25A	25			50	



Characteristics (Typical)

Fig. 1 - Forward Current Derating Curve

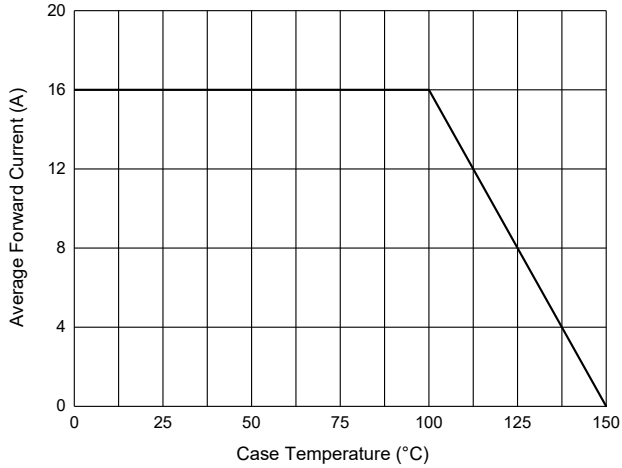


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

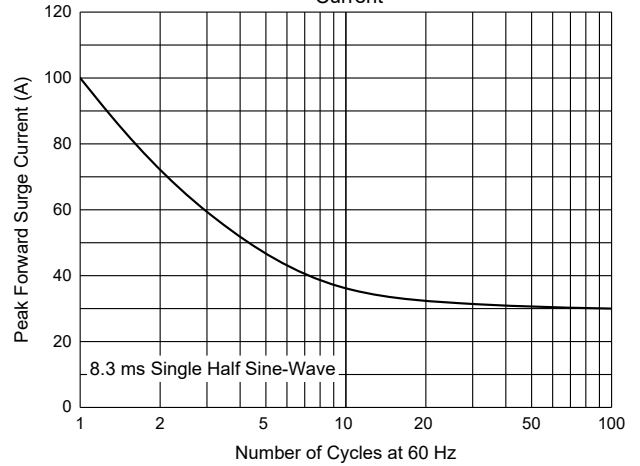


Fig. 3 - Typical Instantaneous Forward Characteristics

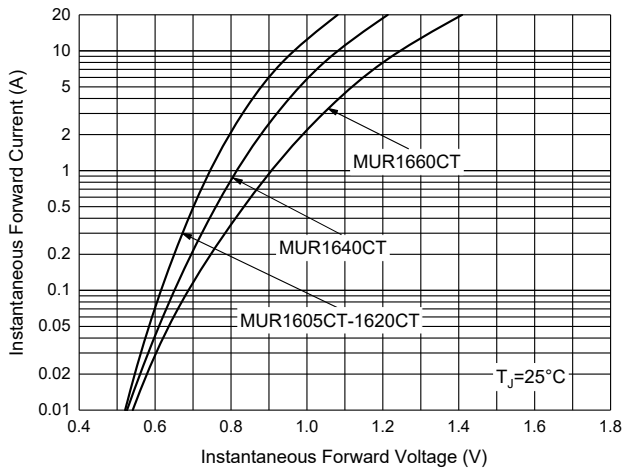
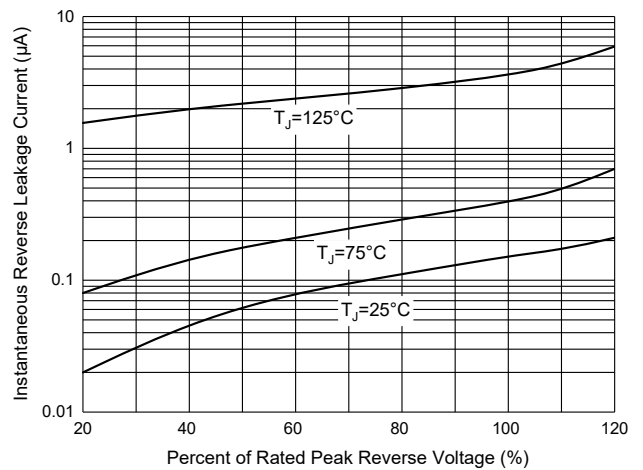
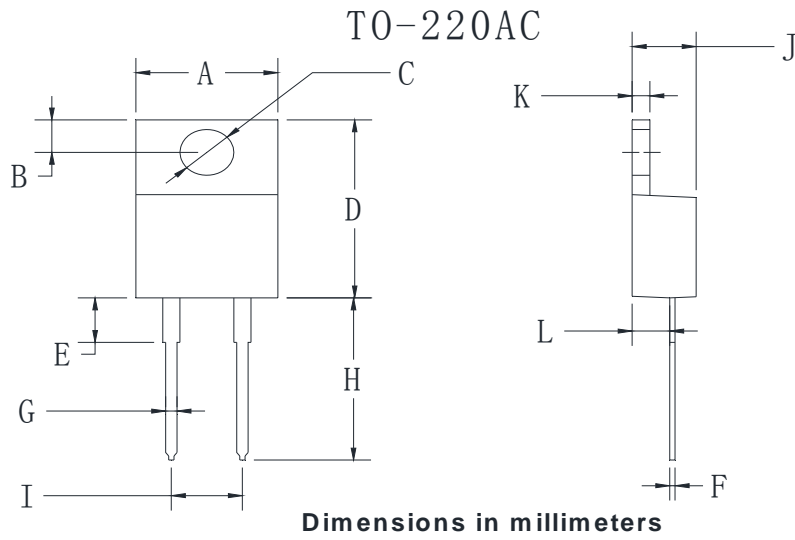


Fig. 4 - Typical Reverse Leakage Characteristics





Outline Dimensions



TO-220AC		
Dim	Min	Max
A	9.5	10.9
B	2.22	3.27
C	3.34	4.31
D	14.5	15.5
E	3.16	4.46
F	0.28	0.64
G	0.68	0.94
H	13.06	14.62
I	4.55	5.60
J	4.04	5.1
K	1.14	1.4
L	2.14	3.19



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