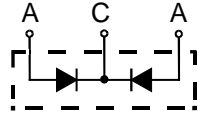
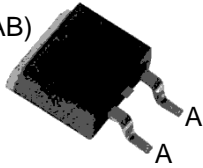


# MURB1610CT thru MURB1620CT

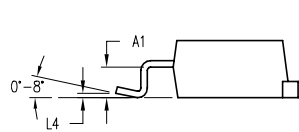
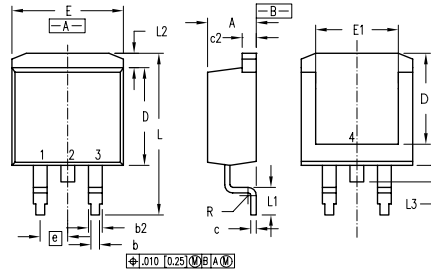
## Ultra Fast Recovery Diodes

C(TAB)



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-263(D<sup>2</sup>PAK)



1. Gate
2. Collector
3. Emitter
4. Collector Bottom Side

Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.06	4.83	.160	.190
A1	2.03	2.79	.080	.110
b	0.51	0.99	.020	.039
b2	1.14	1.40	.045	.055
c	0.46	0.74	.018	.029
c2	1.14	1.40	.045	.055
D	8.64	9.65	.340	.380
D1	8.00	8.89	.315	.350
E	9.65	10.29	.380	.405
E1	6.22	8.13	.245	.320
e	2.54 BSC		.100 BSC	
L	14.61	15.88	.575	.625
L1	2.29	2.79	.090	.110
L2	1.02	1.40	.040	.055
L3	1.27	1.78	.050	.070
L4	0	0.20	0	.008
R	0.46	0.74	.018	.029

	V <sub>RRM</sub>	V <sub>RMS</sub>	V <sub>DC</sub>
	V	V	V
<b>MURB1610CT</b>	100	70	100
<b>MURB1620CT</b>	200	140	200

Symbol	Characteristics	Maximum Ratings	Unit
I <sub>(AV)</sub>	Maximum Average Forward Rectified Current @T <sub>c</sub> =120°C	16	A
I <sub>FSM</sub>	Non Repetitive Peak Forward Surge Current Per Diode Sinusoidal (JEDEC METHOD) T <sub>P</sub> =10ms T <sub>P</sub> =8.3ms	80 90	A
V <sub>F</sub>	Maximum Forward Voltage Pulse Width=300us Duty Cycle I <sub>F</sub> =8A @T <sub>J</sub> =25°C I <sub>F</sub> =8A @T <sub>J</sub> =125°C I <sub>F</sub> =16A @T <sub>J</sub> =25°C I <sub>F</sub> =16A @T <sub>J</sub> =125°C	1.1 1.0 1.25 1.20	V
I <sub>R</sub>	Maximum DC Reverse Current At Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	5 100	uA
C <sub>J</sub>	Typical Junction Capacitance Per Element (Note 1)	80	pF
T <sub>RR</sub>	Maximum Reverse Recovery Time (Note 2)	30	ns
ReJc	Typical Thermal Resistance	3.0	°C/W
T <sub>J</sub> , T <sub>STG</sub>	Operating And Storage Temperature Range	-55 to +150	°C

NOTES: 1. Measured at 1.0MHz And Applied Reverse Voltage Of 4.0V DC.

2. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A.

### FEATURES

- \* Glass passivated chip
- \* Superfast switching time for high efficiency
- \* Low forward voltage drop and high current capability
- \* Low reverse leakage current
- \* High surge capacity

### MECHANICAL DATA

- \* Case: TO-263 molded plastic
- \* Polarity: As marked on the body
- \* Weight: 0.08 ounces, 2.24 grams
- \* Mounting position: Any



# MURB1610CT thru MURB1620CT

## Ultra Fast Recovery Diodes

FIG.1 - FORWARD CURRENT DERATING CURVE

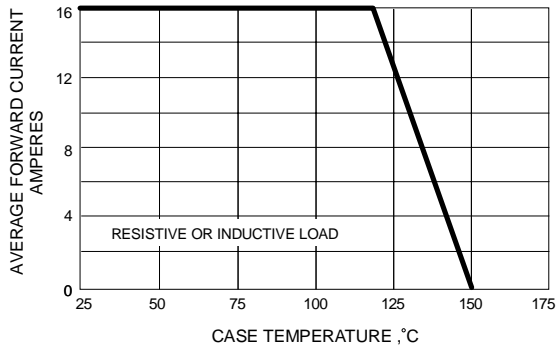


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

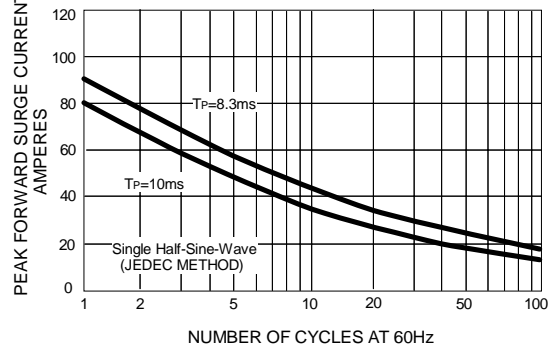


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

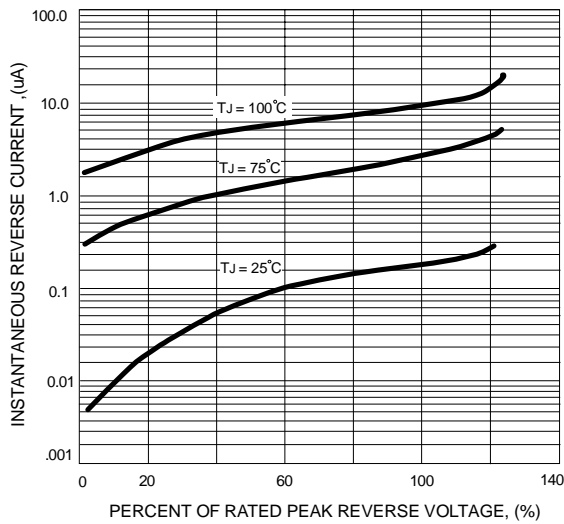


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

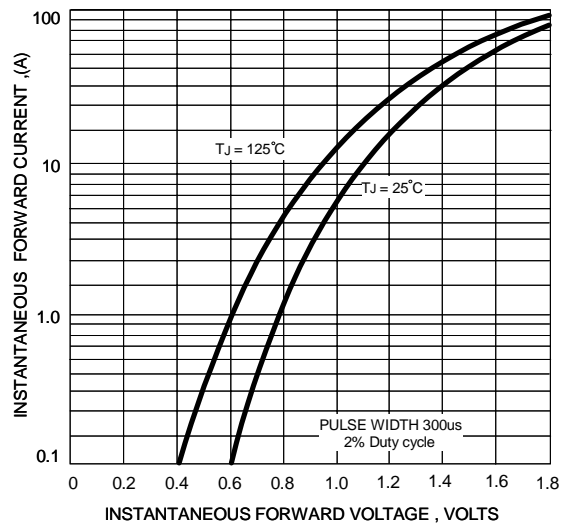


FIG.5 - TYPICAL JUNCTION CAPACITANCE

