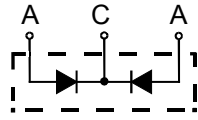


MURB1610CT thru MURB1620CT

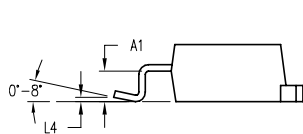
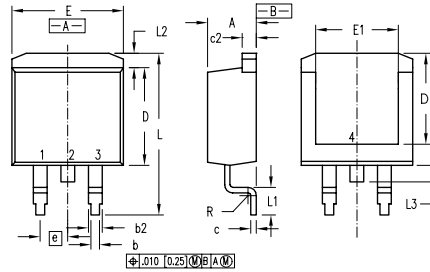
Ultra Fast Recovery Diodes

C(TAB)



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-263(D²PAK)



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

Dim.	Millimeter	Millimeter	Inches	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 _{RRM}	V _{RMS}	V _{DC}
	V	V	V
MURB1610CT	100	70	100
MURB1620CT	200	140	200

Symbol	Characteristics	Maximum Ratings	Unit
I _{AV}	Maximum Average Forward Rectified Current @T _C =120°C	16	A
I _{FSM}	Non Repetitive Peak Forward Surge Current Per Diode Sinusoidal (JEDEC METHOD) T _P =10ms T _P =8.3ms	80 90	A
V _F	Maximum Forward Voltage Pulse Width=300us Duty Cycle I _F =8A @T _J =25°C I _F =8A @T _J =125°C I _F =16A @T _J =25°C I _F =16A @T _J =125°C	1.1 1.0 1.25 1.20	V
I _R	Maximum DC Reverse Current At Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	5 100	uA
C _J	Typical Junction Capacitance Per Element (Note 1)	80	pF
T _{RR}	Maximum Reverse Recovery Time (Note 2)	30	ns
R _{θJC}	Typical Thermal Resistance	3.0	°C/W
T _J , T _{STG}	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_F=0.5A, I_R=1.0A, I_{RR}=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
- * RoHS compliant

MECHANICAL DATA

- * Case: TO-263 molded plastic
- * Polarity: As marked on the body
- * Weight: 2grams
- * Mounting position: Any

Sirectifier®

MURB1610CT thru MURB1620CT

Ultra Fast Recovery Diodes

FIG.1 - FORWARD CURRENT DERATING CURVE

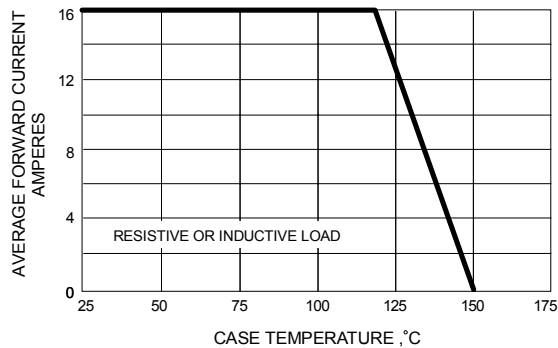


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

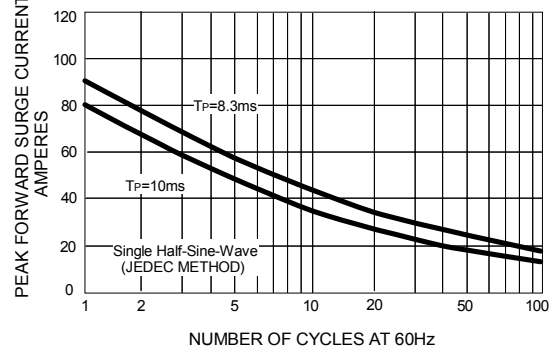


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

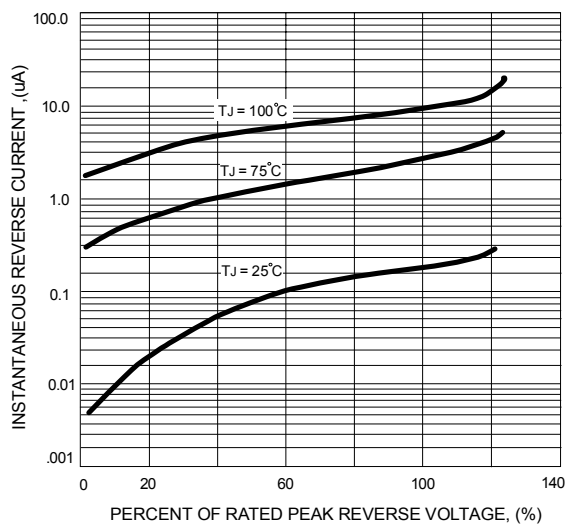


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

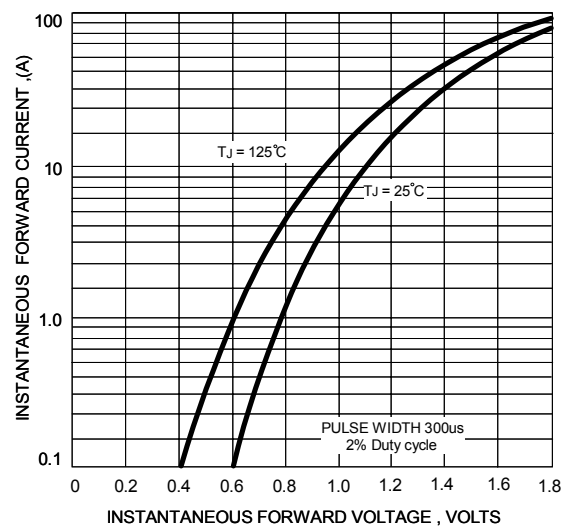


FIG.5 - TYPICAL JUNCTION CAPACITANCE

