

**M·C·C·**

Micro Commercial Components  
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**MURB1605CT**

**THRU**

**MURB1660CT**

## Features

- High Current Capability
- Low Reverse Leakage
- Low Forward Voltage Drop
- High Current Capability
- Super Fast Switching Speed For High Efficiency

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURB1605CT	50V	35V	50V
MURB1610CT	100V	70V	100V
MURB1620CT	200V	140V	200V
MURB1640CT	400V	280V	400V
MURB1660CT	600V	420V	600V

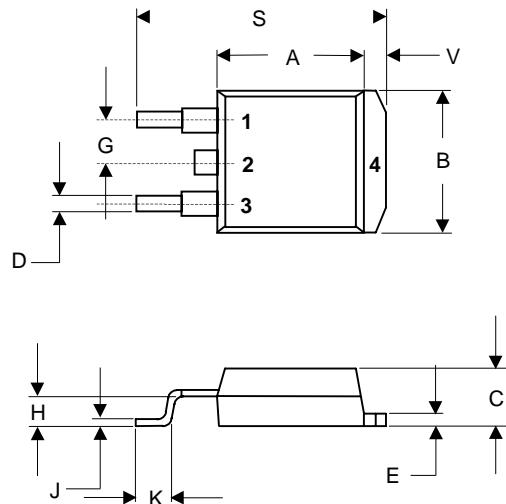
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	16 A	$T_A = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element 1605CT-1620 1640CT 1660CT	$V_F$	0.95V 1.30V 1.50V	$I_{FM} = 8 \text{ A per element}$ $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 500 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Maximum Reverse Recovery Time 1605CT-1620CT 1640CT-1660CT	$T_{rr}$	35ns 50ns	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{rr}=0.25\text{A}$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

**16 Amp  
Super Fast  
Recovery Rectifier  
50 to 600 Volts**

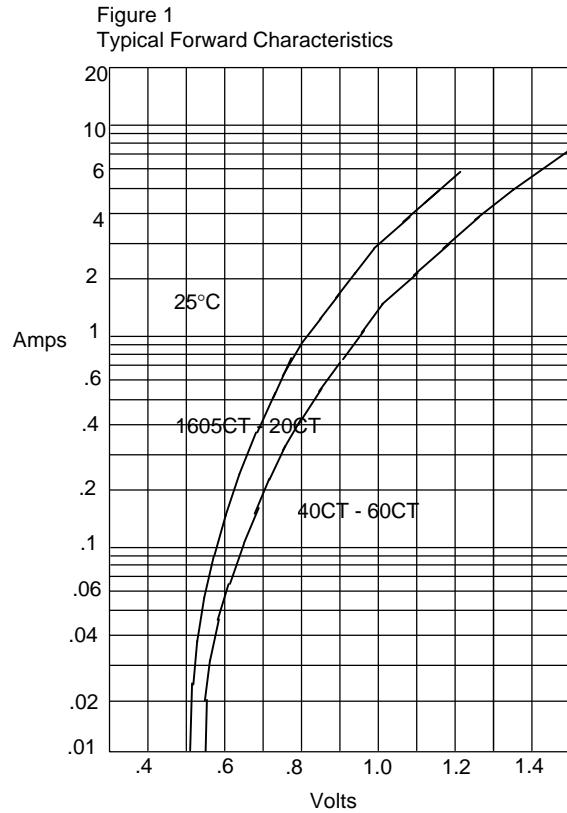
## D<sup>2</sup>-PACK



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.340	.380	8.64	9.65	
B	.380	.405	9.65	10.29	
C	.160	.190	4.06	4.83	
D	.020	.035	.051	.089	
E	.045	.055	1.14	1.40	
G	.100	BSC	2.54	BSC	
H	.080	.110	2.03	2.79	
J	.018	.025	0.46	0.64	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.88	
V	.045	.055	1.14	1.40	

# MBRB1605CT thru MBRB1660CT

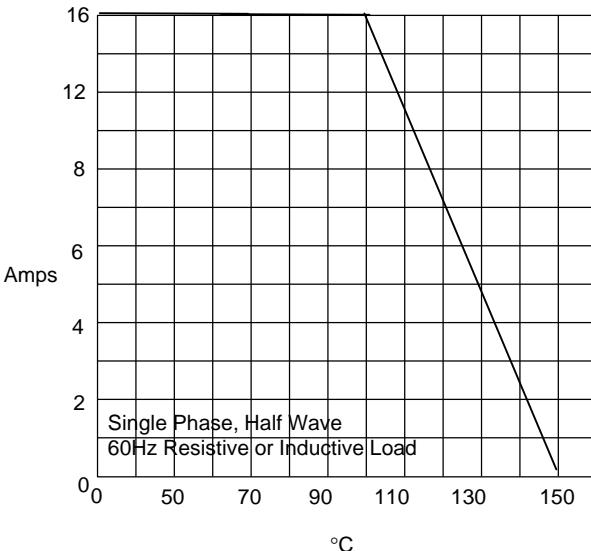
Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus  
Instantaneous Forward Voltage - Volts

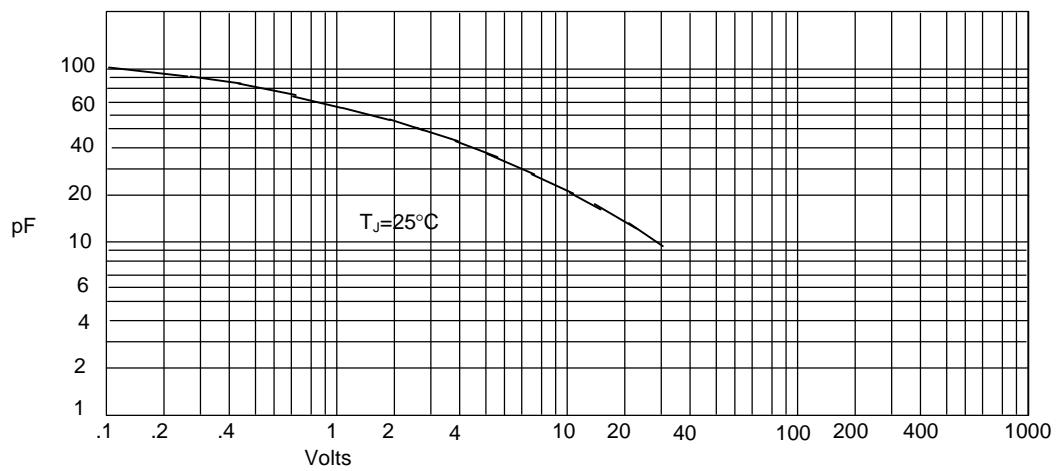
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Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperesversus  
Ambient Temperature - °C

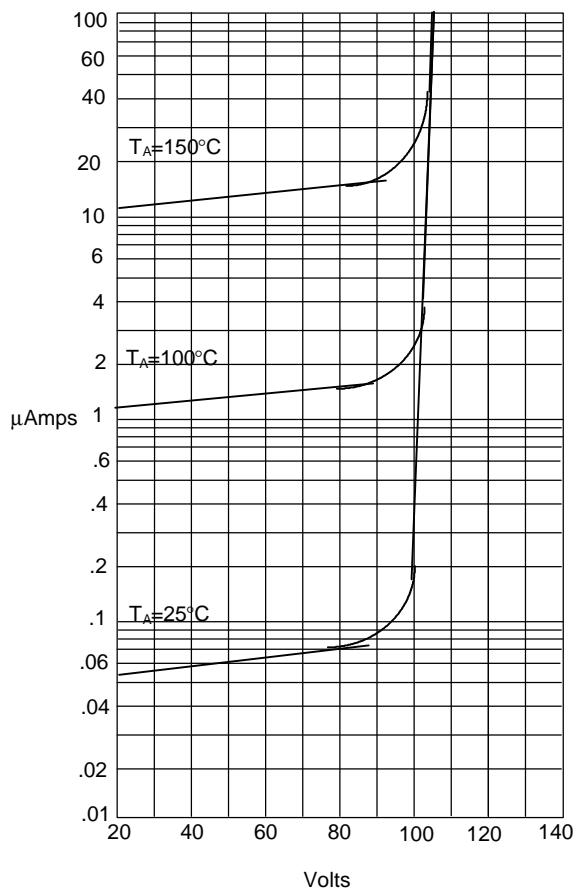
Figure 3  
Junction Capacitance



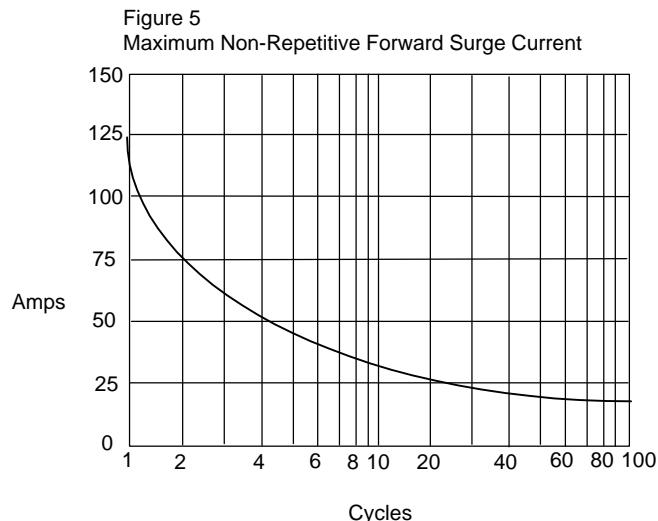
Junction Capacitance - pFversus  
Reverse Voltage - Volts

## MURB1605CT thru MURB1660CT

Figure 4  
Typical Reverse Characteristics

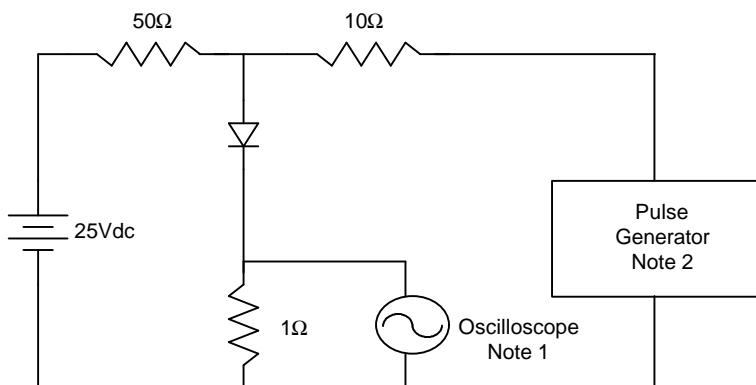


Instantaneous Reverse Leakage Current - MicroAmperesversus  
Percent Of Rated Peak Reverse Voltage - Volts



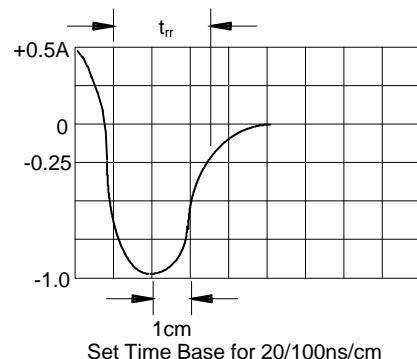
Peak Forward Surge Current - Amperesversus  
Number Of Cycles At 60Hz - Cycles

Figure 6  
Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.
- Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
- Source impedance = 50 ohms
3. Resistors are non-inductive



Set Time Base for 20/100ns/cm