Micro Commercial Components
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MUR3005WT THRU MUR3060WT

30 Amp Super Fast Recovery Rectifier 200 to 600 Volts

Features

- High Surge Capability
- 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

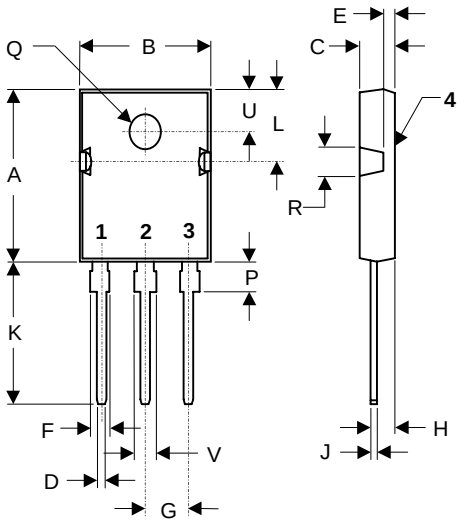
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR3005WT	50V	35V	50V
MUR3010WT	100V	70V	100V
MUR3020WT	200V	140V	200V
MUR3040WT	400V	280V	400V
MUR3060WT	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30 A	T_C = 100°C
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MUR3005WT-3020WT MUR3040WT MUR3060WT	V_F	1.05V 1.30V 1.70V	I_{FM} = 15.0A; T_C = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA 500μA	T_C = 25°C T_C = 125°C
Maximum Reverse Recovery Time MUR3005WT-3040WT MUR3060WT	T_{rr}	50ns 80ns	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

TO-247

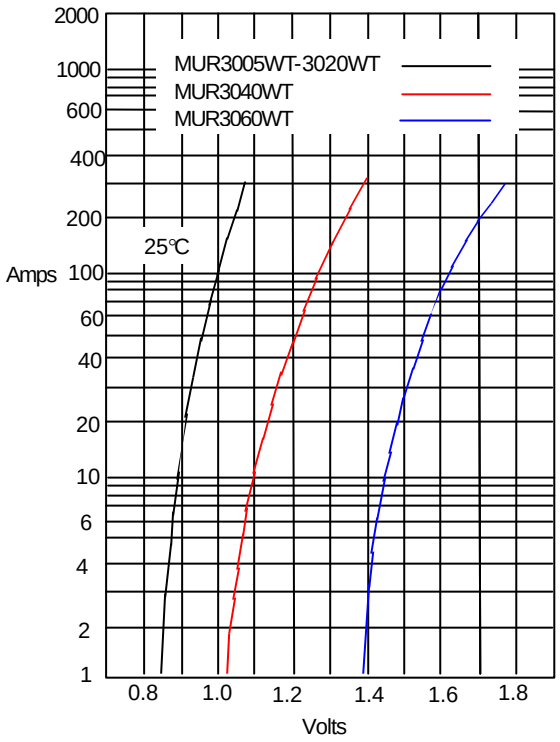


PIN 1. ANODE
PIN 2. CATHODE
PIN 3. ANODE
PIN 4. CATHODE

DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.803	.823	20.40	20.90	
B	.608	.628	15.44	15.95	
C	.185	.205	4.70	5.21	
D	.043	.051	1.09	1.30	
E	.059	.064	1.50	1.63	
F	.071	.086	1.80	2.18	
G	.215	BSC	5.45	BSC	
H	.101	.130	2.56	2.87	
J	.019	.027	0.48	0.68	
K	.613	.633	15.57	16.08	
L	.286	.295	7.26	7.50	
P	.122	.133	3.10	3.38	
Q	.138	.145	3.50	3.70	∅
R	.130	.150	3.30	3.80	
U	.209	BSC	5.30	BSC	
V	.120	.134	3.05	3.40	

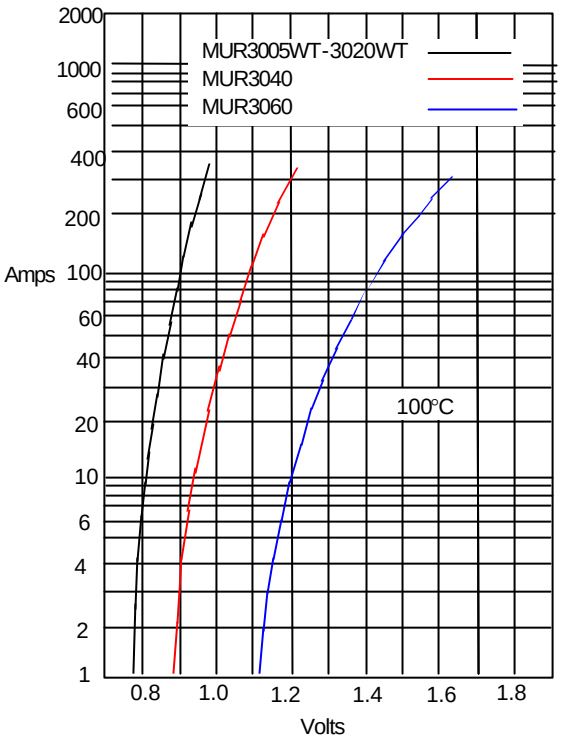
MUR3005WT thru MUR3060WT

Figure 1
Typical Forward Characteristics @ T_J = 25°C



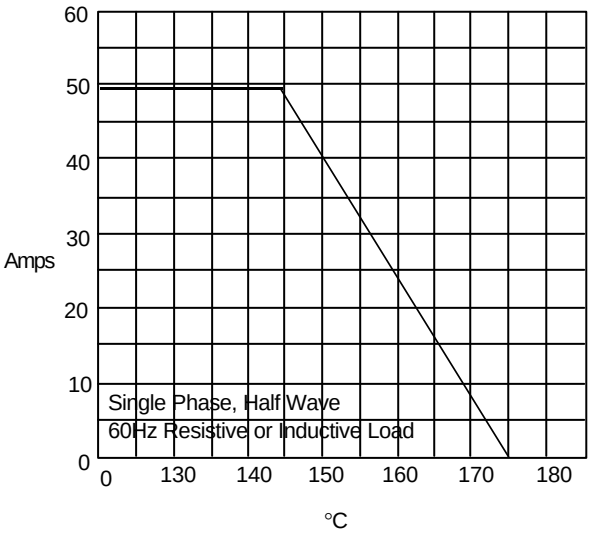
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Forward Characteristics @ T_J = 100°C



Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

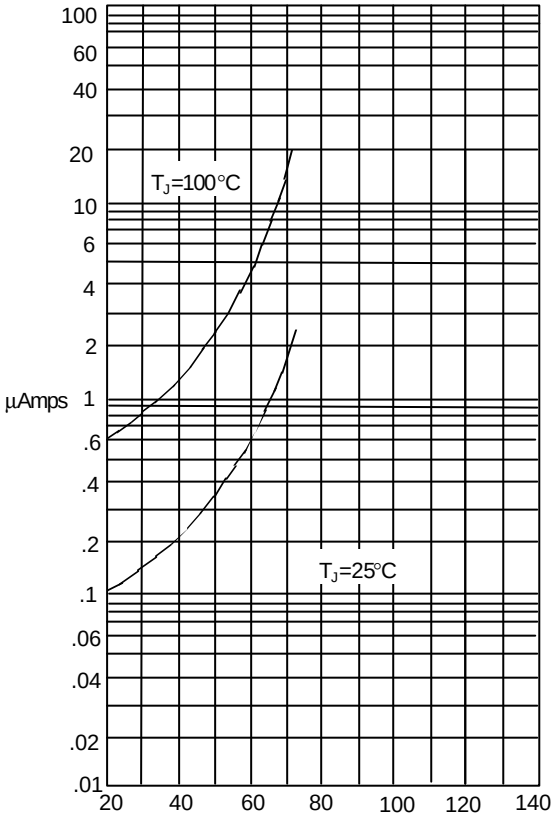
Figure 3
Forward Derating Curve



Average Forward Rectified Current Per Leg - Amperes *versus*
Case Temperature - °C

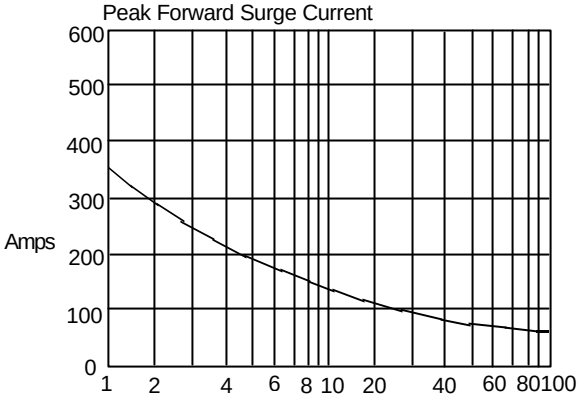
MUR3005WT thru MUR3060WT

Figure 4
Typical Reverse Characteristics



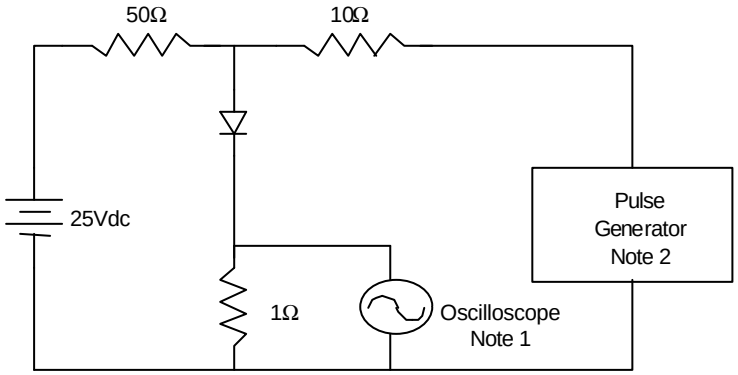
Instantaneous Reverse Leakage Current - MicroAmperes *versus*

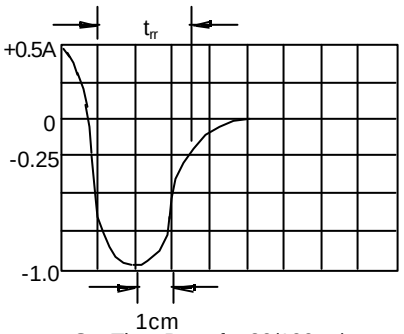
Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

Figure 7
Reverse Recovery Time Characteristic And Test Circuit Diagram





Set Time Base for 20/100ns/cm

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