



Micro Commercial Components



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Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Super Fast Recovery Times With EPI Die For High Efficiency
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 25°C/W Junction To Lead
- Typical Thermal Resistance; 35°C/W Junction To Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage	Working Peak Reverse Voltage
MURS3G	MURS3G	400V	280V	400V	300V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_L = 110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V 0.92V(typ)	$I_{FM} = 3.0\text{A}$; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 350 μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	35ns	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
Pulse Energy in Avalanche Mode, Non Repetitive (inductive load switch off)	E_R	25mJ	$I_{(BR)R}=1\text{A}$, $T_J=25^\circ\text{C}$
Typical Junction Capacitance	C_J	40pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

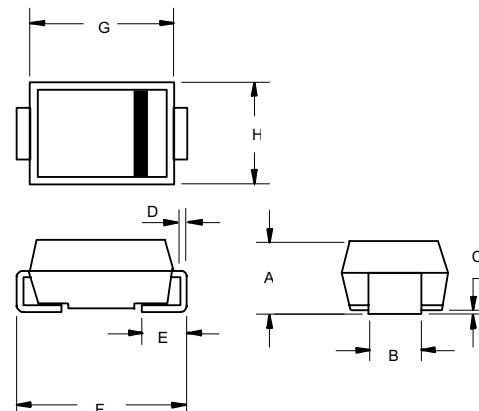
*Pulse test: Pulse width 300 μsec , Duty cycle 2%

1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a

MURS3G

3 Amp Super Fast Recovery Rectifier 400 Volts

DO-214AB (SMC) (LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES	MIN	MAX	MM	
A	.079	.079	.103	2.00	2.62
B	.108	.108	.128	2.75	3.25
C	.002	.002	.008	0.051	0.203
D	.006	.006	.012	0.152	0.305
E	.030	.030	.060	0.76	1.52
F	.305	.305	.320	7.75	8.13
G	.260	.260	.280	6.60	7.11
H	.220	.220	.245	5.59	6.22

SUGGESTED SOLDER PAD LAYOUT

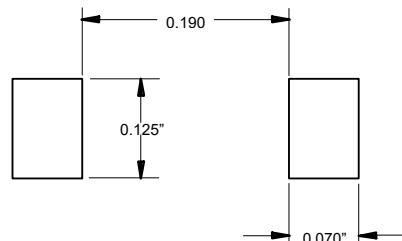


Figure 1
Typical Forward Characteristics

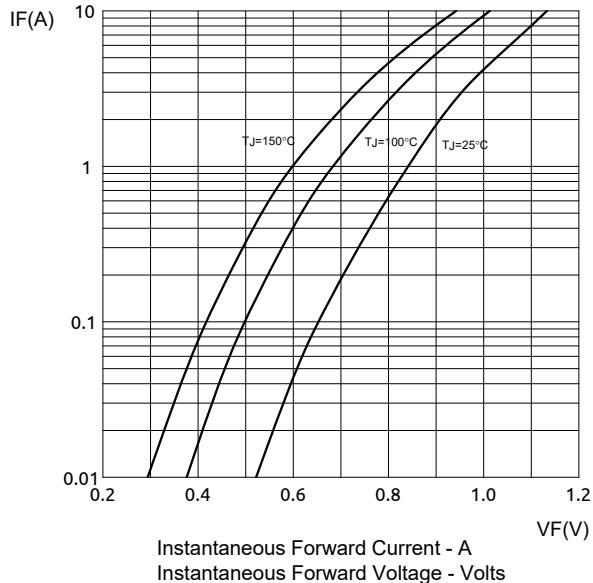


Figure 2
Forward Derating Curve

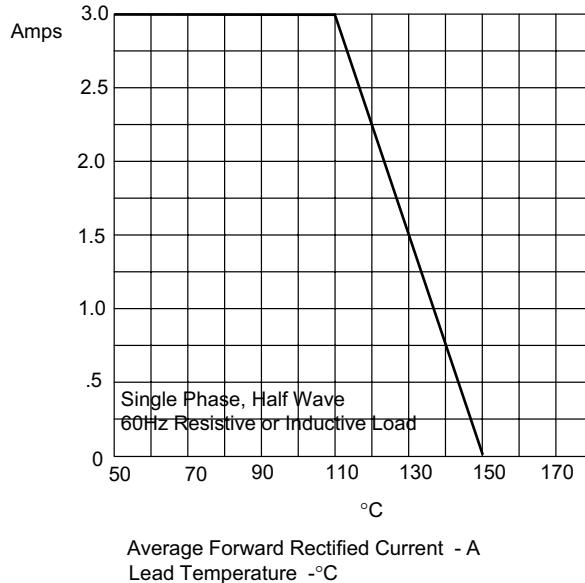


Figure 3
Typical Junction Capacitance

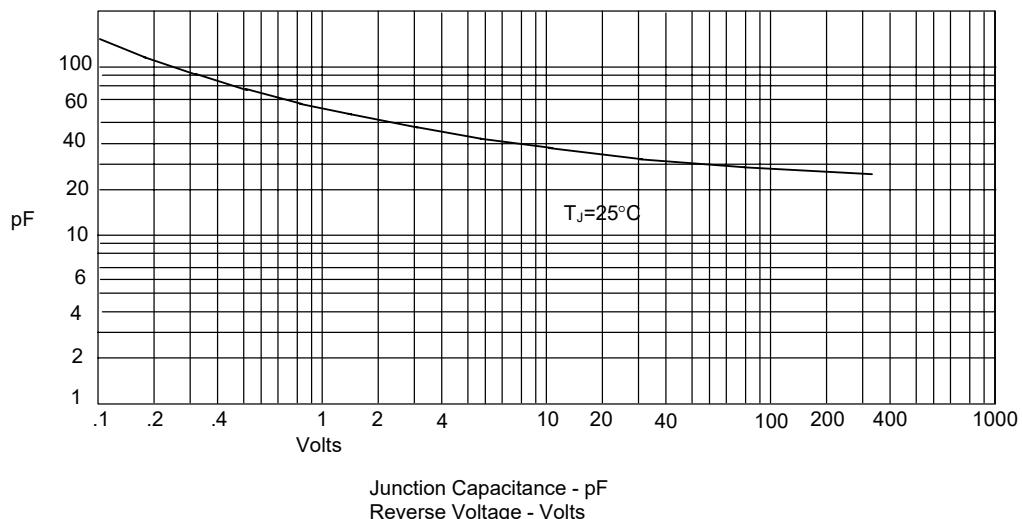
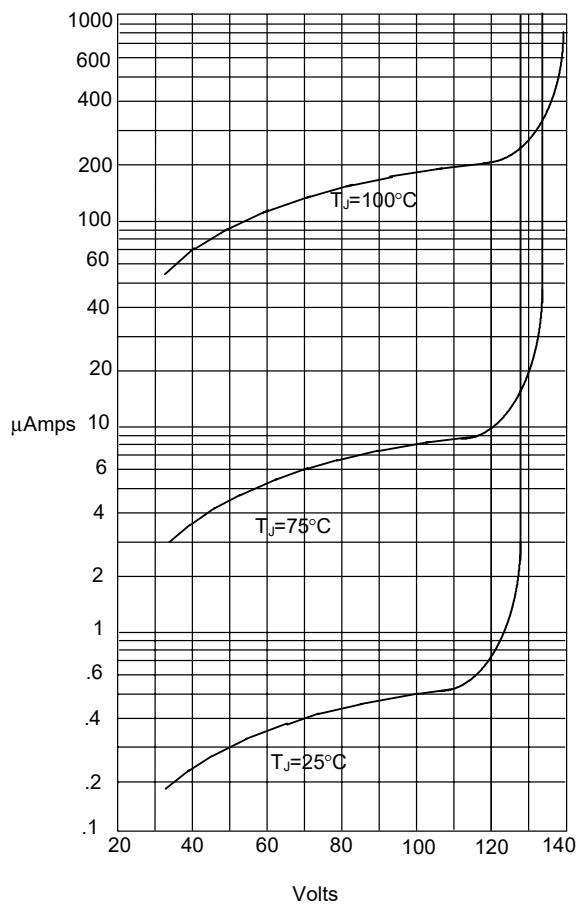
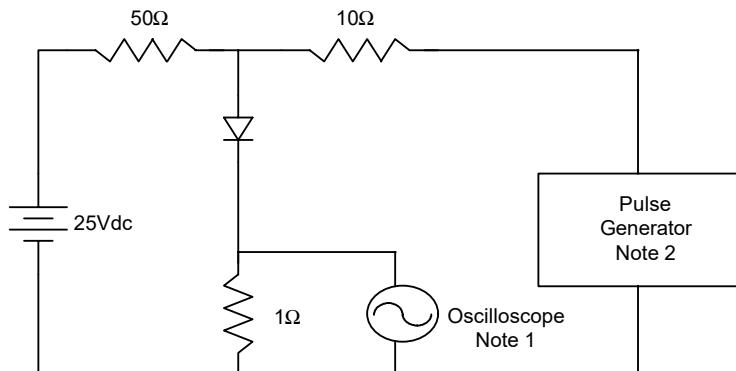


Figure 4
Typical Reverse Characteristics



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

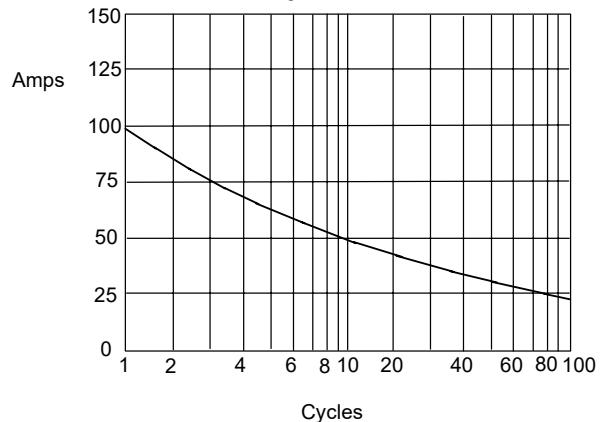
Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram



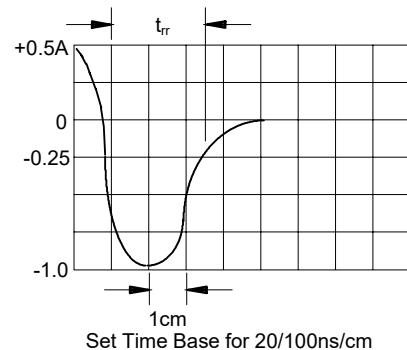
Notes:

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

Figure 5
Peak Forward Surge Current



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





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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