



Micro Commercial Components



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Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material:Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- High Temp Soldering: 250°C for 10 Seconds At Terminals
- Super Fast Recovery Times For High Efficiency
- Gull Wing Lead Bend To Prevent Arcing
- Perfect For Ballast, Television And Monitor Applications

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER1M-GTPS01	ER1M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.50V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 100 μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	100ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance	C_J	45pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

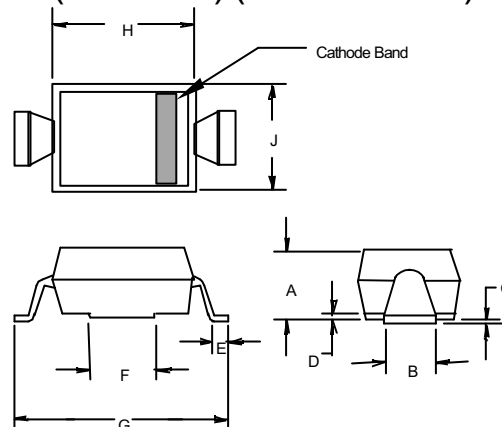
*Pulse test: Pulse width 200 μsec , Duty cycle 2%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

ER1M-GTPS01

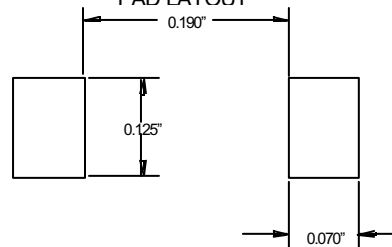
1 Amp Super Fast Recovery Silicon Rectifier 1000 Volts

DO-215AA (HSMBG) (Round Lead)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.075	.116	1.90	2.95	
B	.078	.087	1.98	2.21	
C	.002	.008	.05	.20	
D	—	.02	—	.51	
E	.015	.03	.38	.76	
F	.065	.084	1.65	2.13	
G	.245	.276	6.22	7.00	
H	.160	.180	4.06	4.57	
J	.130	.151	3.30	3.83	

SUGGESTED SOLDER PAD LAYOUT



ER1M-GTPS01

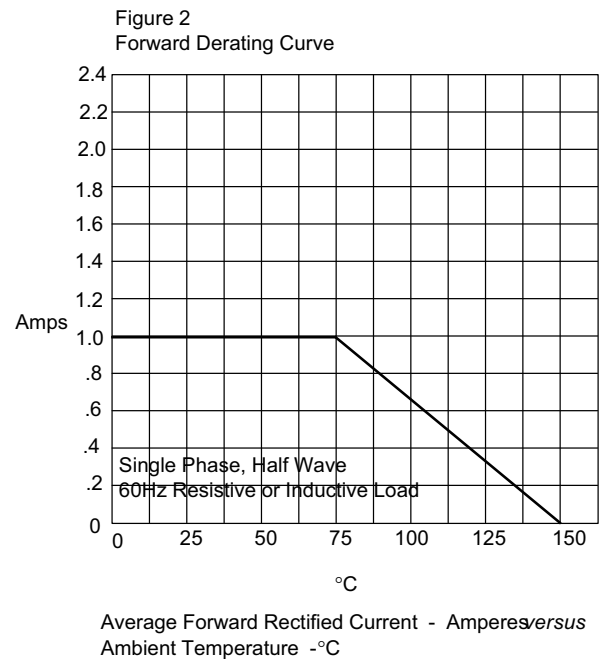
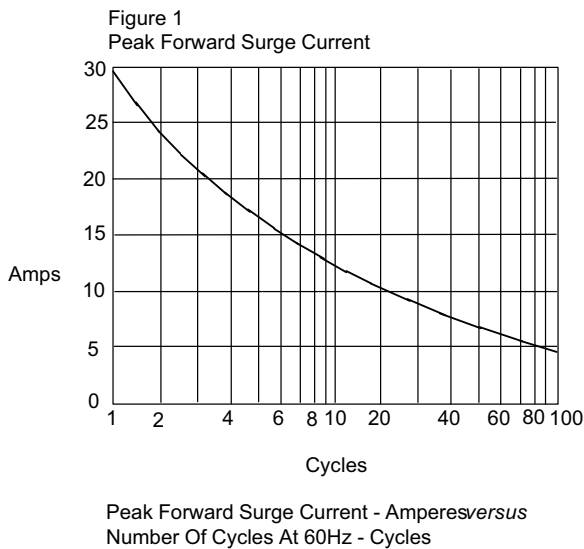
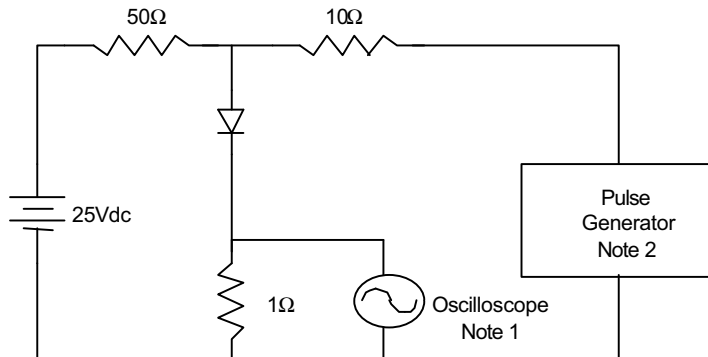
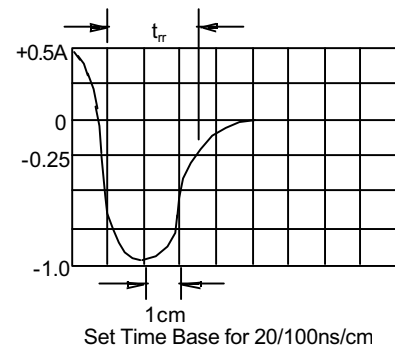


Figure 3
Reverse Recovery Time Characteristic And Test Circuit Diagram



- 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



Ordering Information

Device	Packing
ER1M-GTPS01	Tape&Reel;3Kpcs/Reel

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