



Micro Commercial Components



Micro Commercial Components  
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# ER2A THRU ER2M

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Ultrafast Recovery Times For High Efficiency

## Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 20°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER2A	ER2A	50V	35V	50V
ER2B	ER2B	100V	70V	100V
ER2C	ER2C	150V	105V	150V
ER2D	ER2D	200V	140V	200V
ER2G	ER2G	400V	280V	400V
ER2J	ER2J	600V	420V	600V
ER2K	ER2K	800V	560V	800V
ER2M	ER2M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

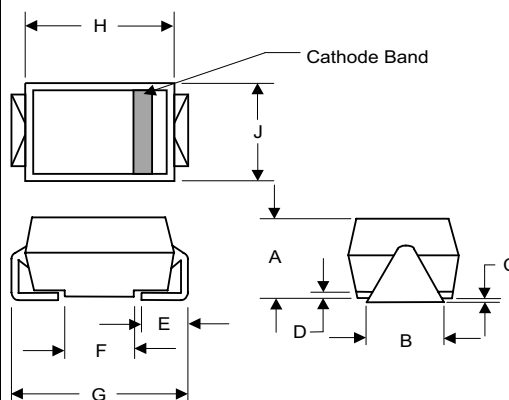
Average Forward Current	$I_{F(AV)}$	2.0A	$T_J = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	ER2A-D .975V ER2G-J 1.35V ER2K-M 1.70V	$I_{FM} = 2.0A$ ; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5μA 150μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{rr}$	50ns 60ns 100ns	$I_F = 0.5A$ , $I_R = 1.0A$ , $I_{rr} = 0.25A$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R = 4.0V$

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

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

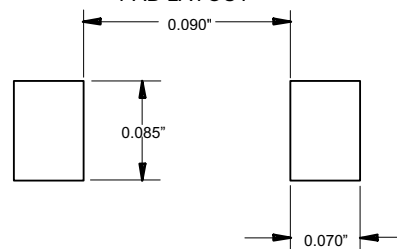
## 2 Amp Ultra Fast Recovery Silicon Rectifier 50 to 1000 Volts

### DO-214AA (HSMB) (Round Lead)



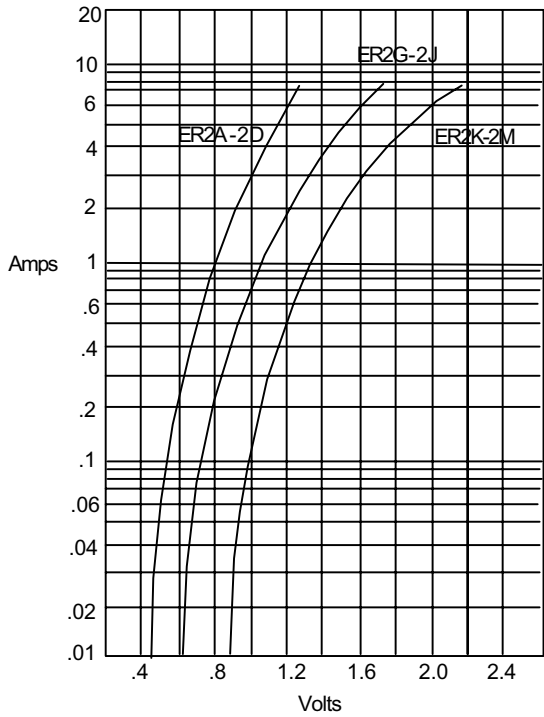
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.078	.116	1.98	2.95	
B	.075	.089	1.90	2.25	
C	.002	.008	.05	.20	
D	----	.02	----	.51	
E	.035	.055	.90	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

### SUGGESTED SOLDER PAD LAYOUT



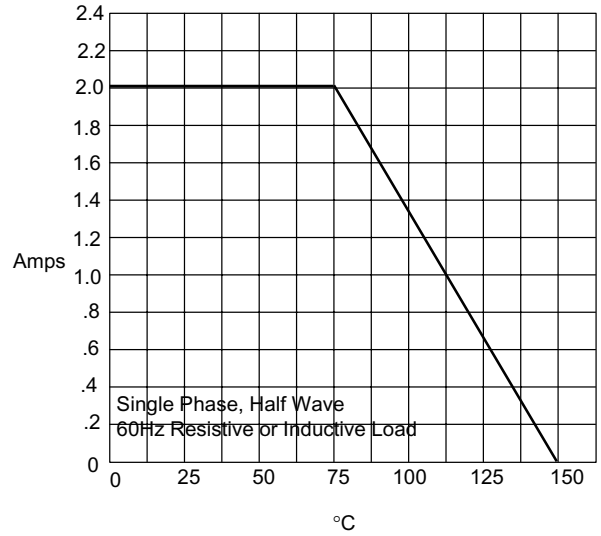
# ER2A thru ER2M

Figure 1  
Typical Forward Characteristics



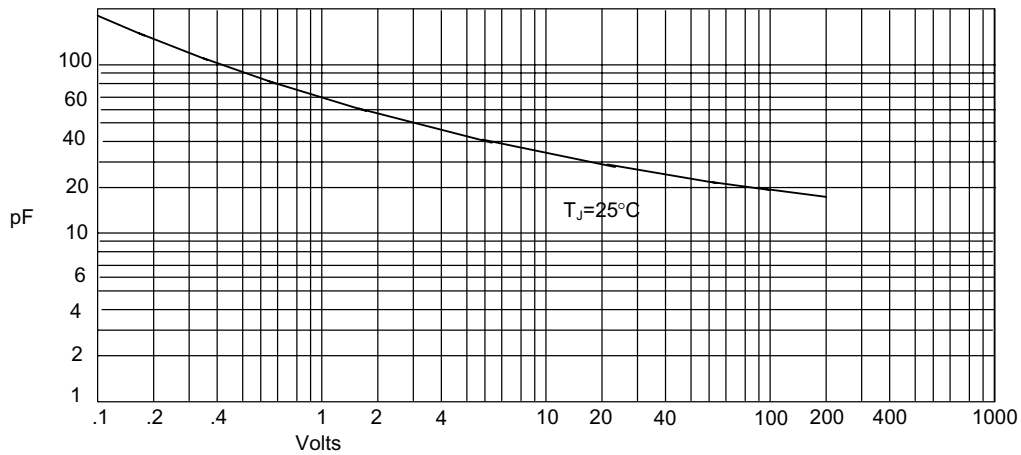
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

# ER2A thru ER2M

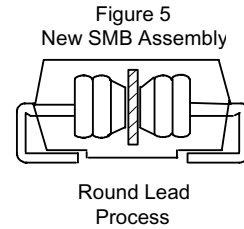
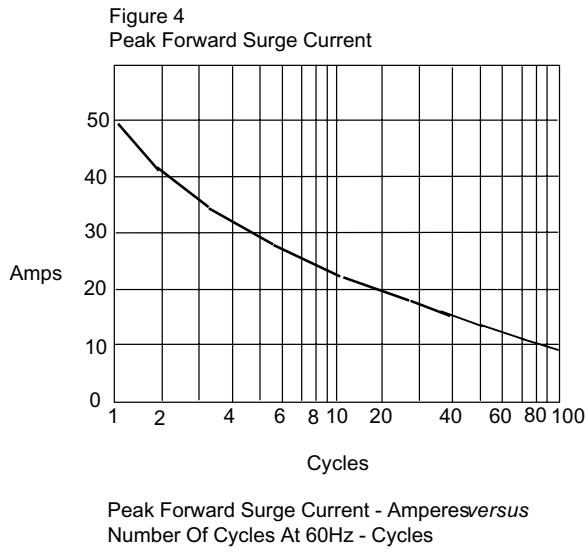
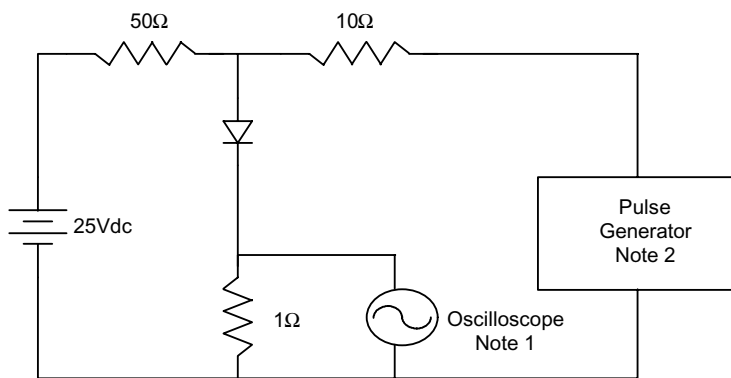
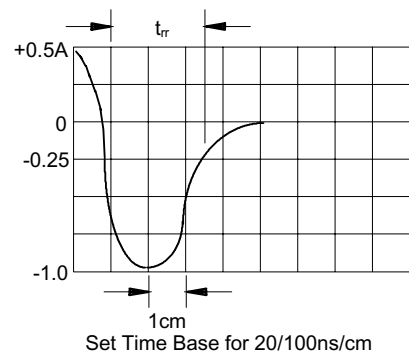


Figure 6  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- 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





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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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