



Micro Commercial Components



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ER2A **THRU** ER₂M

2 Amp Ultra Fast Recovery Silicon Rectifier 50 to 1000 Volts

- 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

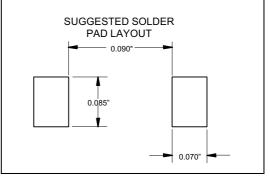
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage	_	Voltage
ER2A	ER2A	50V	35V	50V
ER2B	ER2B	100V	70V	100V
ER2C	ER2C	150V	105V	150V
ER2D	ER2D	200V	140V	200V
ER2G	ER2G	400V	280V	400V
ER2J	ER2J	600V	420V	600V
ER2K	ER2K	800V	560V	800V
ER2M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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	$I_{F(AV)}$	2.0A	T _J = 75°C
Current			
Peak Forward Surge	I_{FSM}	50A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
ER2A-D ER2G-J	V_{F}	.975V 1.35V	$I_{FM} = 2.0A;$
ER2K-M		1.70V	$T_J = 25^{\circ}C^*$
Maximum DC			
Reverse Current At	I_R	5μΑ	T _J = 25°C
Rated DC Blocking		150μΑ	T _J = 100°C
Voltage			10 100
Maximum Reverse			
Recovery Time			
ER2A-D ER2G-J	T_{rr}	50ns 60ns	$I_F=0.5A, I_R=1.0A,$
ER2G-J ER2K-M		100ns	I _{rr} =0.25A
Typical Junction	CJ	25pF	Measured at
Capacitance	-	•	1.0MHz, V _R =4.0V

DO-214AA (HSMB) (Round Lead) Cathode Band

DIMENSIONS						
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.078	.116	1.98	2.95		
В	.075	.089	1.90	2.25		
С	.002	.008	.05	.20		
D		.02		.51		
Е	.035	.055	.90	1.40		
F	.065	.091	1.65	2.32		
G	.205	.224	5.21	5.69		
Н	.160	.180	4.06	4.57		
J	.130	.155	3.30	3.94		



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

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

ER2A thru ER2M



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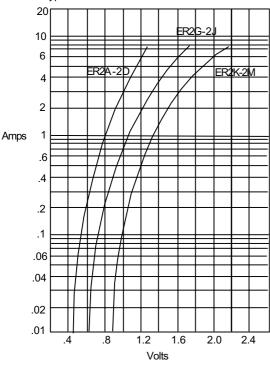
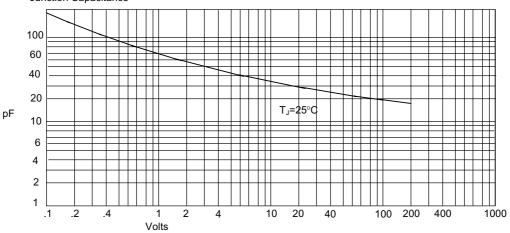


Figure 2 Forward Derating Curve 2.4 2.2 2.0 1.8 1.6 1.4 Amps 1.0 .8 .6 Single Phase, Half Wave .2 60Hz Resistive or Inductive Load 0 150 100 125 75 ٥С

Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C

Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 3 Junction Capacitance

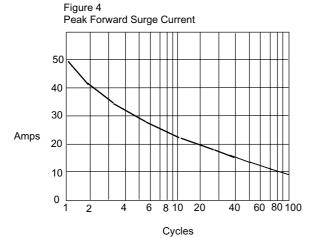


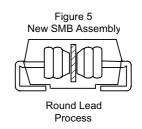
Junction Capacitance - pF*versus* Reverse Voltage - Volts

ER2A thru ER2M



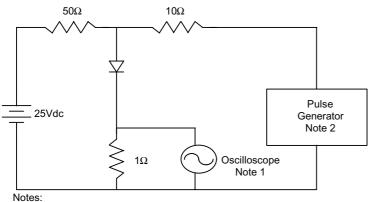
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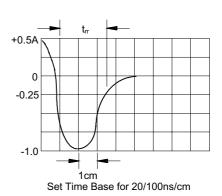




Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 6 Reverse Recovery Time Characteristic And Test Circuit Diagram





- 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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