# NOT RECOMMENDED FOR NEW DESIGNS USE SK32B-LTP~SK310B-LTP Series



**Micro Commercial Components** 



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Phone: (818) 701-4933 Fax: (818) 701-4939 SK32B THRU SK310B

### **Features**

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

## **Maximum Ratings**

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 10°C/W Junction To Lead

MCC	Device	Maximum	Maximum	Maximum
Catalog Number	Marking	Recurrent Peak Reverse	RMS Voltage	DC Blocking
		Voltage	, onage	Voltage
SK32B	SK32B	20V	14V	20V
SK33B	SK33B	30V	21V	30V
SK34B	SK34B	40V	28V	40V
SK35B	SK35B	50V	35V	50V
SK36B	SK36B	60V	42V	60V
SK38B	SK38B	80V	56V	80V
SK310B	SK310B	100V	70V	100V

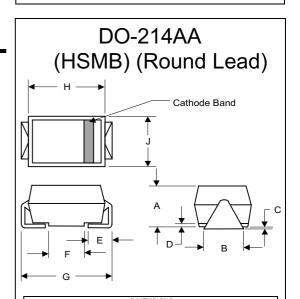
### Electrical Characteristics @ 25°C Unless Otherwise Specified

	_		_
Average Forward	$I_{F(AV)}$	3.0A	T <sub>L</sub> = 100°C
Current			
Peak Forward Surge	$I_{FSM}$	100A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
SK32B-34B	$V_{F}$	.50V	$I_{FM} = 3.0A;$
SK35B-36B		.75V	T <sub>J</sub> = 25°C*
SK38B-310B		.85V	
Maximum DC			
Reverse Current At	$I_R$	.5mA	T <sub>J</sub> = 25°C
Rated DC Blocking		20mA	T <sub>J</sub> = 100°C
Voltage			
Typical Junction	CJ	45pF	Measured at
Capacitance		•	1.0MHz, V <sub>R</sub> =4.0V

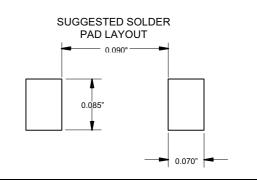
<sup>\*</sup>Pulse test: Pulse width 200 µsec, Duty cycle 2%

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

## 3 Amp Schottky Rectifier 20 to 100 Volts



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		
			•			



## SK32B thru SK310B

Figure 1
Typical Forward Characteristics



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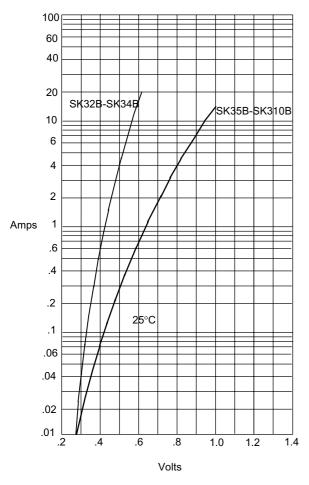
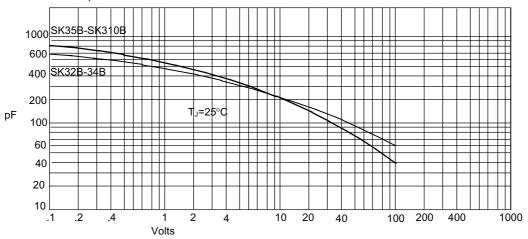


Figure 2 Forward Derating Curve 3.0 2.5 2.0 1.5 Amps 1.0 Single Phase, Half Wave 60Hz Resistive or Inductive 0 <u></u> 100 120 140 160 ٥С

Average Forward Rectified Current - Amperes*versus* Lead Temperature -°C

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

Figure 3 Junction Capacitance



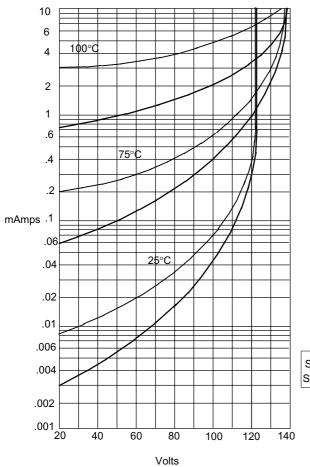
Junction Capacitance - pF*versus* Reverse Voltage - Volts

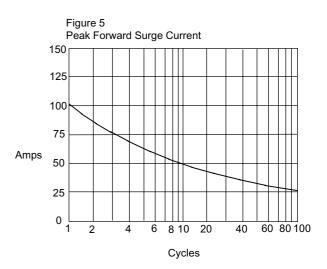
## SK32B thru SK310B

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Figure 4
Typical Reverse Characteristics





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

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



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### **Ordering Information:**

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

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

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