### NOT RECOMMENDED FOR NEW DESIGNS **USE MBR15100ULPS to replace SK1510**



Micro Commercial Components



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**SK152 THRU** SK1510

## Features

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

# **Maximum Ratings**

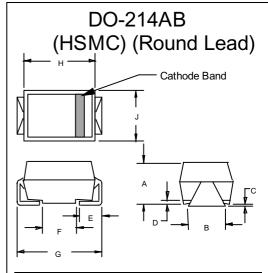
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 20°C/W Junction To Lead

MST		Maximum	Maximum	Maximum
Part	Device	Recurrent	RMS	DC
Number	Marking	Peak Reverse	Voltage	Blocking
		Voltage		Voltage
SK152	SK152	20V	14V	20V
SK153	SK153	30V	21V	30V
SK1535	SK1535	35V	24.5V	35V
SK154	SK154	40V	28V	40V
SK1545	SK1545	45V	31.5V	45V
SK155	SK155	50V	35V	50V
SK156	SK156	60V	42V	60V
SK158	SK158	80V	56V	80V
SK1510	SK1510	100V	70V	100V

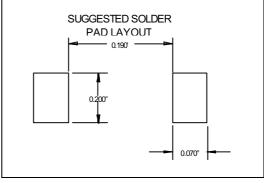
### Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward	$I_{F(AV)}$	15.0A	T∟ = 95°C
Current			
Peak Forward Surge	I <sub>FSM</sub>	275A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
SK152-1545	$V_{F}$	.55V	$I_{FM} = 15.0A;$
SK155-1510		.85V	$T_J = 25^{\circ}C^*$
Maximum DC			
Reverse Current At	$I_R$	1mA	T <sub>J</sub> = 25°C
Rated DC Blocking		20mA	$T_{J} = 100^{\circ}C$
Voltage			
Typical Junction	$C_{\supset}$	500pF	Measured at
Capacitance			1.0MHz, V <sub>R</sub> =4.0V

15 Amp Schottky Rectifier 20 to 100 Volts



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.200	.214	5.08	5.43		
В	.177	.203	4.70	5.30		
С	.002	.005	.05	.13		
D	-	.02	-	.51		
E	.047	.056	1.20	1.42		
F	.168	.179	4.27	4.55		
G	.309	.322	7.85	8.18		
Н	.239	.243	6.08	6.18		
J	.234	.240	5.95	6.10		



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

# SK152 thru SK1510

Figure 1 Typical Forward Characteristics



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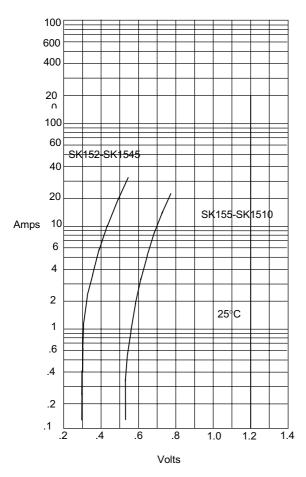
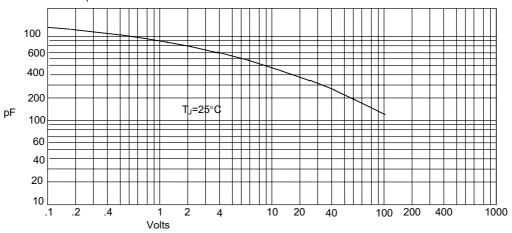


Figure 2 Forward Derating Curve 15.0 12.5 10. 7.5 Amps 5.0 2.5 Single Phase, Half Wav 100 140 160 180 120 °C

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

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

Figure 3 Junction Capacitance



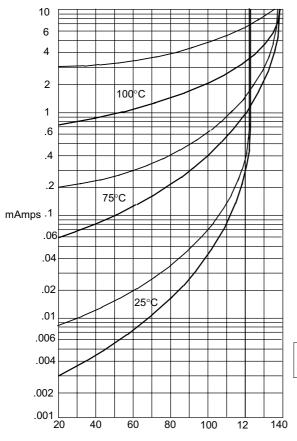
Junction Capacitance - pF *versus* Reverse Voltage - Volts

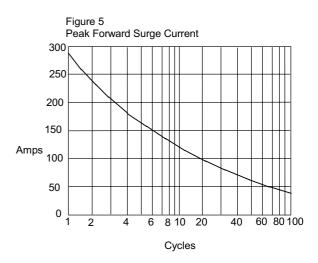
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Figure 4
Typical Reverse Characteristics





Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts

Volts



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### Ordering Information:

Device	Packing		
Part Number-TP	Tape&Reel: 1.5Kpcs/Reel		

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

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