



# THE DATASHEET OF SK1510-TP



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



Micro Commercial Components

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## 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 Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking 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

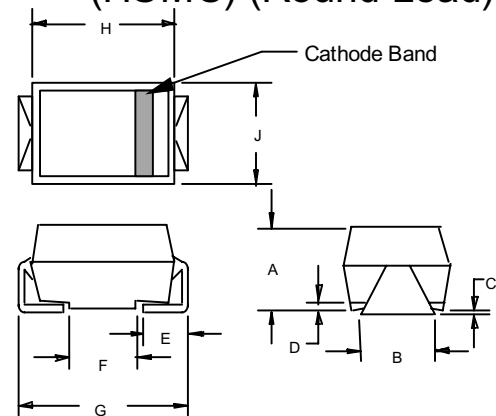
Average Forward Current	$I_{F(AV)}$	15.0A	$T_L = 95^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	275A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.55V .85V	$I_{FM} = 15.0A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1mA 20mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	500pF	Measured at 1.0MHz, $V_R=4.0V$

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

**SK152  
THRU  
SK1510**

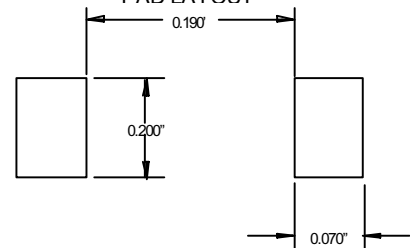
**15 Amp Schottky  
Rectifier  
20 to 100 Volts**

**DO-214AB  
(HSMC) (Round Lead)**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.200	.214	5.08	5.43	
B	.177	.203	4.70	5.30	
C	.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	
H	.239	.243	6.08	6.18	
J	.234	.240	5.95	6.10	

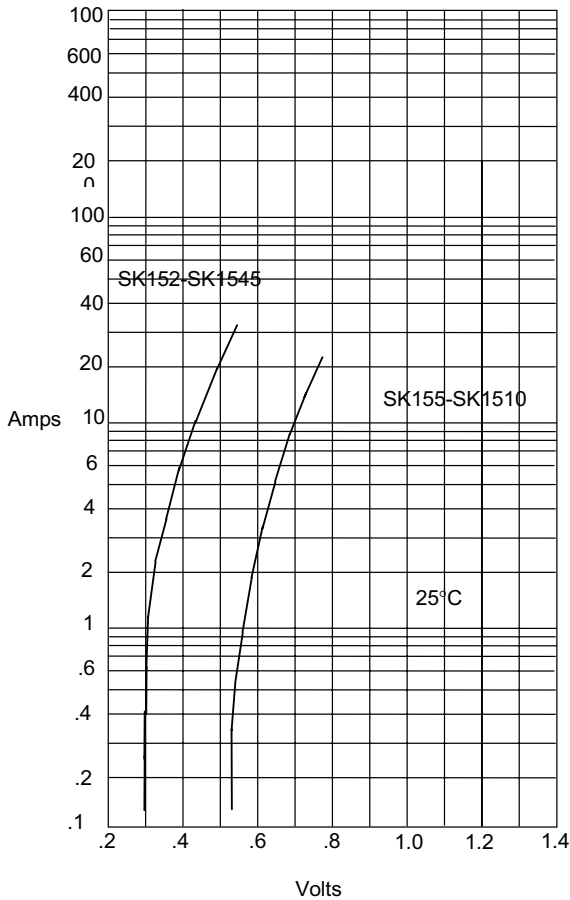
**SUGGESTED SOLDER  
PAD LAYOUT**



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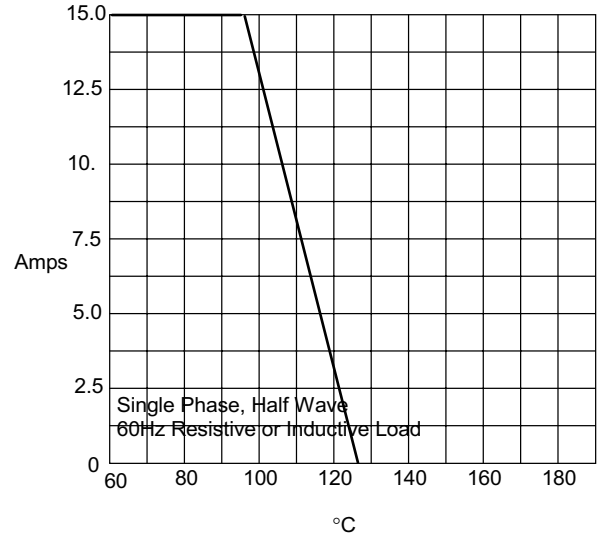
# SK152 thru SK1510

Figure 1  
Typical Forward Characteristics



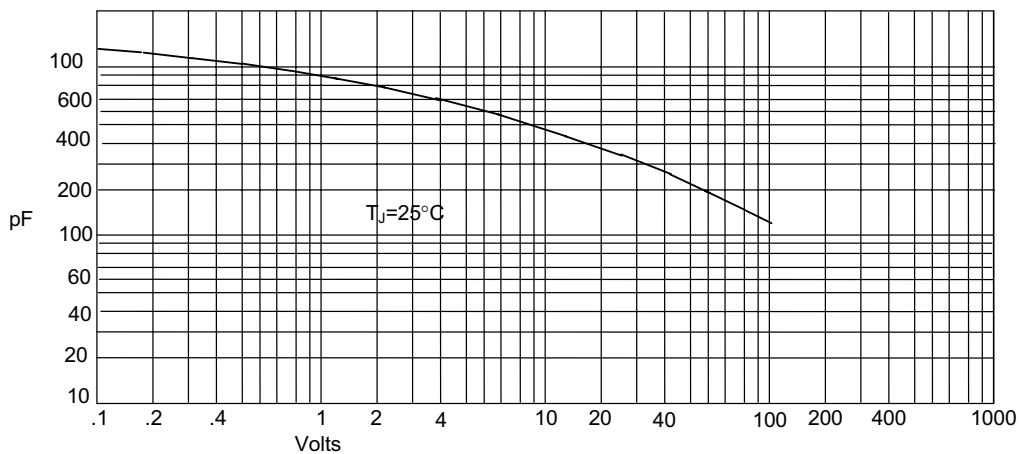
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes  
versus  
Lead Temperature °C

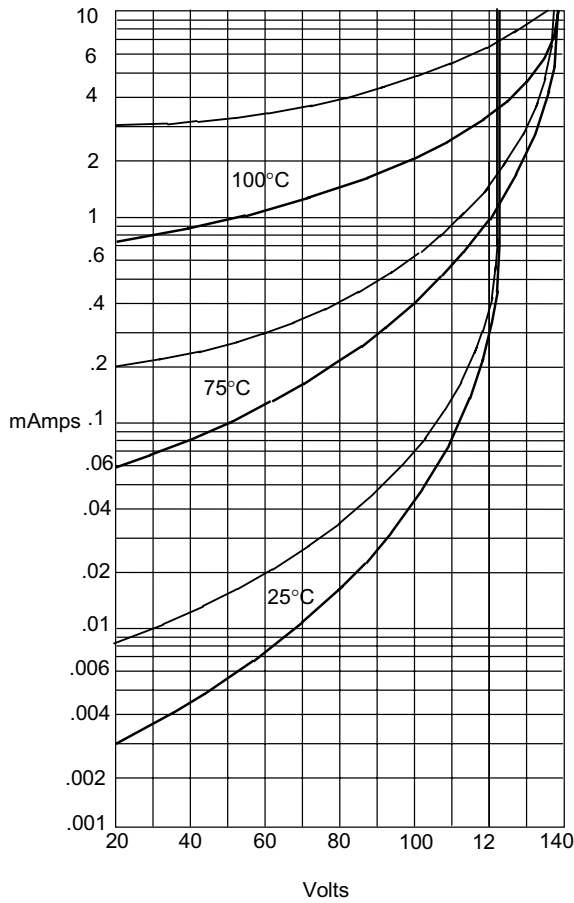
Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

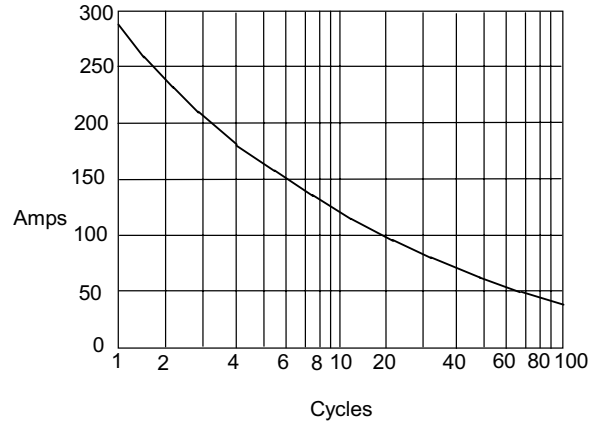
# SK152 thru SK1510

Figure 4  
Typical Reverse Characteristics



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

Figure 5  
Peak Forward Surge Current



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

SK152-SK1545 ———  
SK155-SK1510 ———



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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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