Micro Commercial Components

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SK102 THRU SK1010

10 Amp Schottky Rectifier 20 to 100 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- For Surface Mount Applications
- High Current Capability With Low Forward Voltage
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 18°C/W Junction To Lead

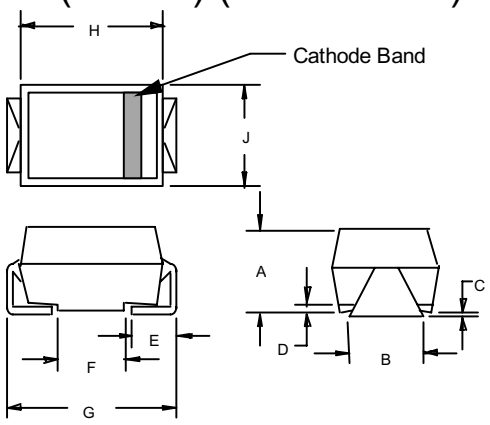
MST Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK102	SK102	20V	14V	20V
SK103	SK103	30V	21V	30V
SK104	SK104	40V	28V	40V
SK1045	SK1045	45V	31.5V	45V
SK105	SK105	50V	35V	50V
SK106	SK106	60V	42V	60V
SK108	SK108	80V	56V	80V
SK1010	SK1010	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	T_L = 95°C
Peak Forward Surge Current	I_{FSM}	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SK102-1045 SK105-1010	V_F	.65V .85V	I_{FM} = 10.0A; T_J = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1mA 20mA	T_J = 25°C T_J = 100°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.

DO-214AB
(HSMC) (Round Lead)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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

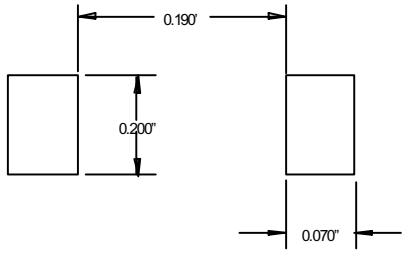
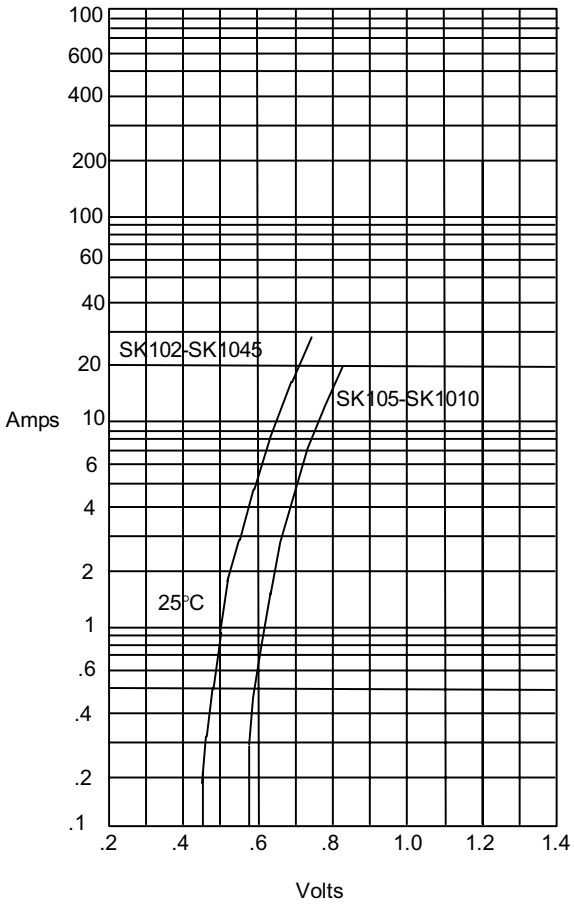
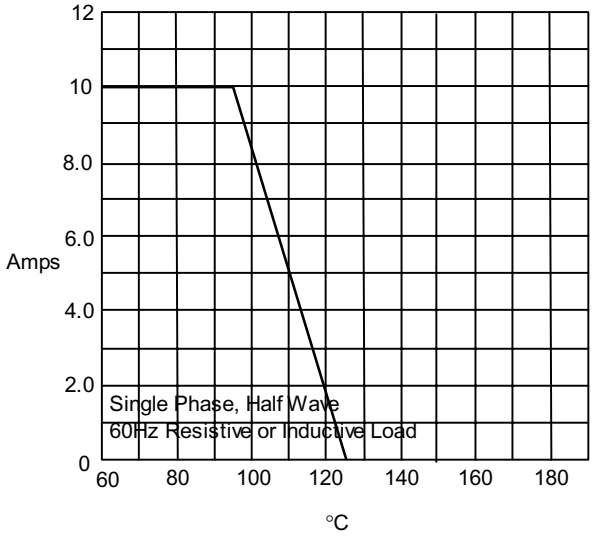


Figure 1
Typical Forward Characteristics



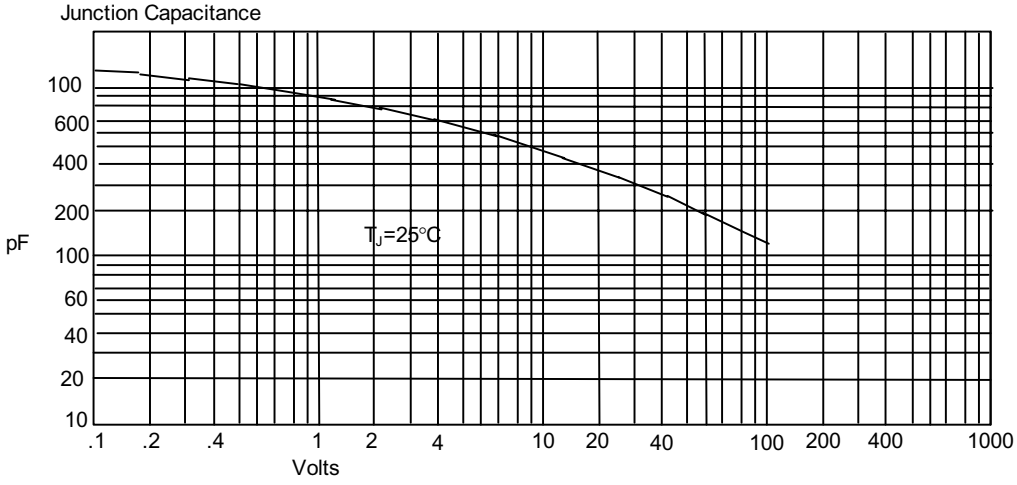
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



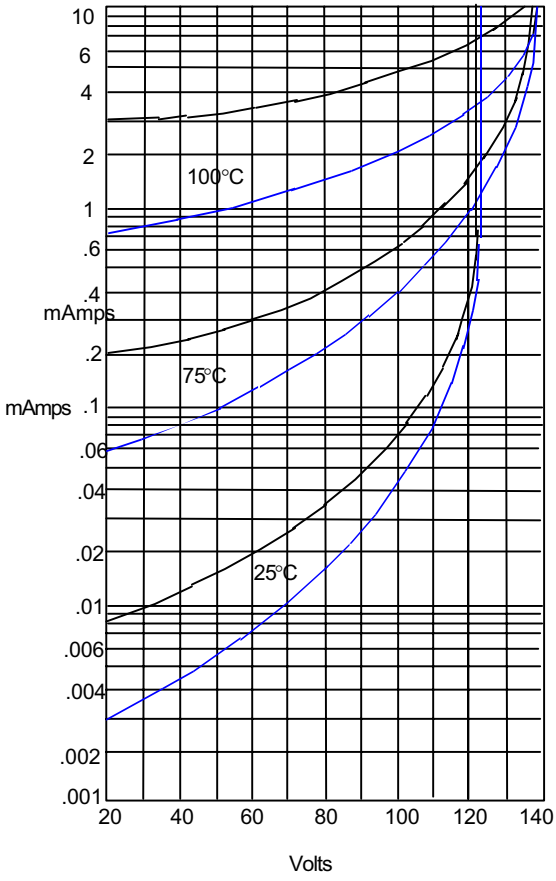
Average Forward Rectified Current - Amperes
versus Lead Temperature - C

Figure 3
Junction Capacitance



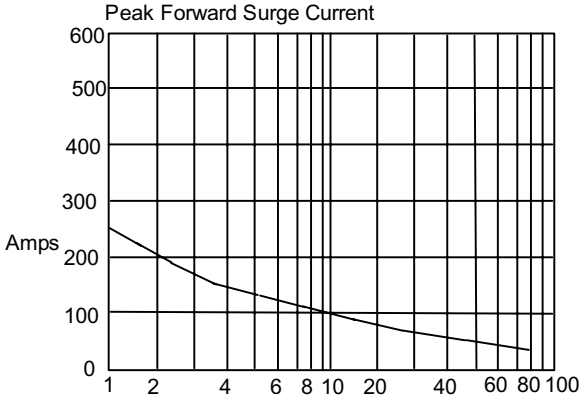
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

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

SK102-SK1045
SK105-SK1010

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Ordering Information :

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

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