

# SK12-L THRU SK110-L

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Reverse Energy Tested and Guard Ring Protection
- High Current Capability and Low Forward Voltage
- Extremely Low Thermal Resistance
- 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; 15°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK12-L	SK12	20V	14V	20V
SK13-L	SK13	30V	21V	30V
SK14-L	SK14	40V	28V	40V
SK15-L	SK15	50V	35V	50V
SK16-L	SK16	60V	42V	60V
SK18-L	SK18	80V	56V	80V
SK110-L	SK110	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

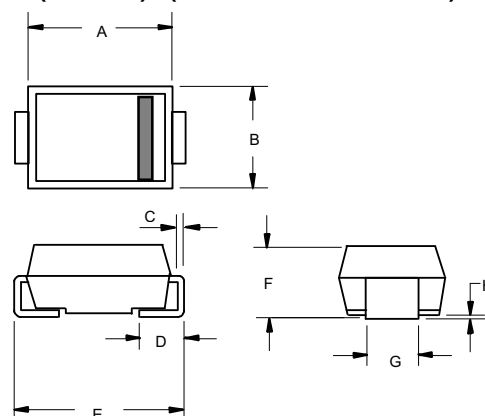
Average Forward Current	$I_{F(AV)}$	1.0A	$T_L = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SK12~14 SK15~16 SK18~110	$V_F$	.50V .72V .85V	$I_{FM} = 1.0A$ ; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	.5mA 20mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance SK12 SK13~110	$C_J$	110pF 30pF	Measured at 1.0MHz, $V_R=4.0V$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

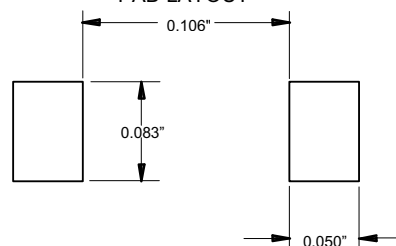
## 1 Amp Schottky Rectifier 20 to 100 Volts

### DO-214AA (SMB) (LEAD FRAME)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.160	.185	4.06	4.70	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.200	.220	5.08	5.59	
F	.079	.096	2.00	2.44	
G	.075	.087	1.91	2.21	
H	.002	.008	0.05	0.203	

### SUGGESTED SOLDER PAD LAYOUT



# SK12-L thru SK110-L

## Rating and Characteristic Curves

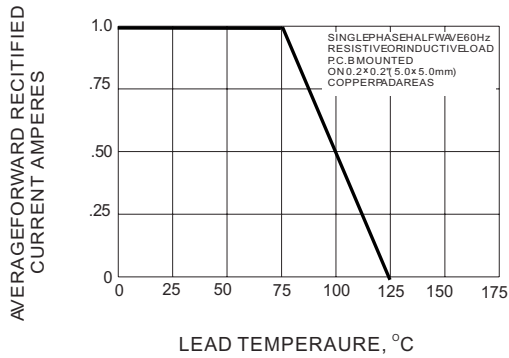


Figure 1. -- Forward current derating curve

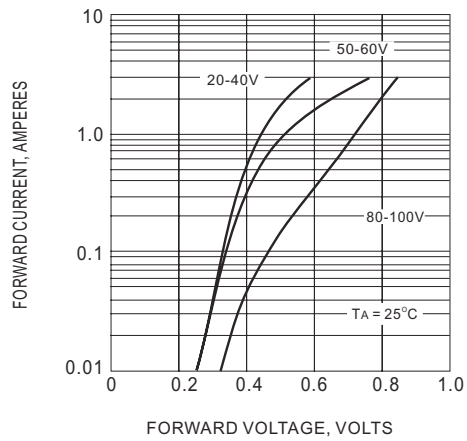


Figure 2. -- Typical Instantaneous Forward Characteristic

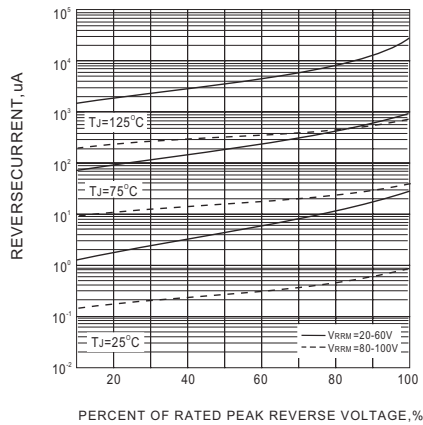


Figure 3. -- Typical Reverse Characteristics

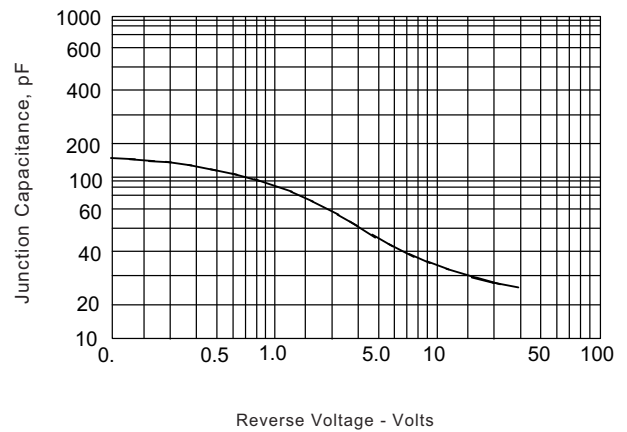


Figure 4. -- Typical Junction Capacitance

## Ordering Information :

Device	Packing
SK12-LTP~ SK110-LTP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. SK12-LTP-HF~SK110-LTP-HF

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