



## SK12 THRU SK16

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

TECHNICAL  
SPECIFICATION

**VOLTAGE: 20 TO 60V CURRENT: 1.0A**

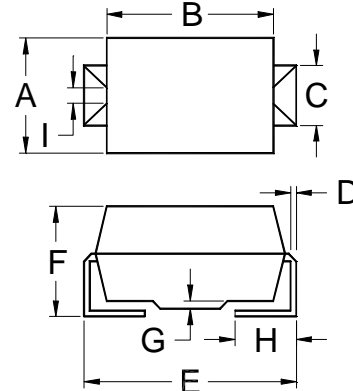
#### FEATURES

- Ideal for surface mount pick and place application
- Low profile package
- Low power loss, high efficiency
- High current capability, low  $V_F$
- High surge capability
- Open junction chip, silastic passivated
- High temperature soldering guaranteed: 260°C/10sec/at terminal

#### MECHANICAL DATA

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O recognized flame retardant epoxy
- Polarity: Color band denotes cathode

#### DSMA/DO-214AC



	A	B	C	D	
MAX.	.110(2.79)	.177(4.50)	.075(1.90)	.012(0.305)	
MIN.	.100(2.54)	.157(3.99)	.052(1.32)	.006(0.152)	
	E	F	G	H	I
MAX.	.208(5.28)	.090(2.29)	.008(0.203)	.060(1.52)	.035(0.88)
MIN.	.194(4.93)	.078(1.98)	.004(0.102)	.030(0.76)	.027(0.68)

Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	SK12	SK13	SK14	SK15	SK16	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Rectified Current ( $T_L=110^\circ\text{C}$ )	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	$I_{FSM}$	30					A
Maximum Instantaneous Forward Voltage (at rated forward current)	$V_F$	0.5		0.7			V
Maximum DC Reverse Current ( $T_a=25^\circ\text{C}$ ) (at rated DC blocking voltage) ( $T_a=100^\circ\text{C}$ )	$I_R$	0.5			10.0		mA mA
Typical Junction Capacitance (Note 1)	$C_J$	110					pF
Typical Thermal Resistance (Note 2)	$R_{\theta(ja)}$	20					°C/W
Storage and Operation Junction Temperature	$T_{STG}, T_J$	-65 to +150					°C

Note:

1. Measured at 1.0 MHz and applied voltage of  $4.0V_{dc}$
2. Thermal resistance from junction to terminal mounted on 5x5mm copper pad area