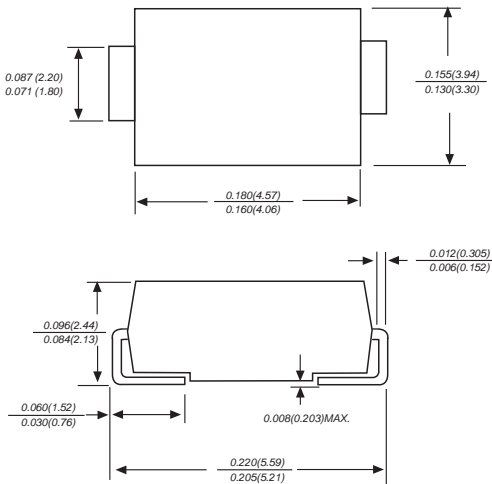




# SK12 THRU SK1200

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**  
 Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 Ampere

## DO-214AA/SMB



Dimensions in inches and (millimeters)

## FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

## MECHANICAL DATA

**Case:** JEDEC DO-214AA molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

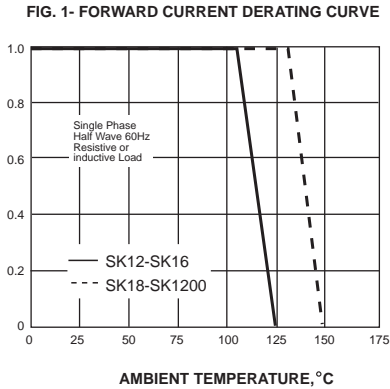
Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	SK12	SK13	SK14	SK15	SK16	SK18	SK110	SK1150	SK1200	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	VOLTS	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum average forward rectified current at $T_L$ (see fig. 1)	$I_{(AV)}$	1.0									Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30.0									Amps	
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.45	0.55	0.70		0.85		0.95		Volts		
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=100^\circ C$	$I_R$	0.5						0.2		mA		
		10.0			5.0		2.0					
Typical junction capacitance (NOTE 1)	$C_J$	110			90			pF				
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0									$^\circ C/W$	
Operating junction temperature range	$T_J$	-50 to +125					-50 to +150					$^\circ C$
Storage temperature range	$T_{STG}$	-50 to +150									$^\circ C$	

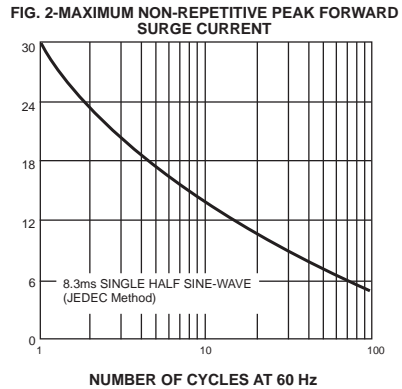
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SK12 THRU SK1200

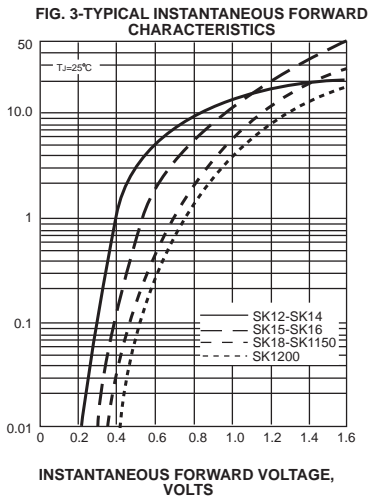
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



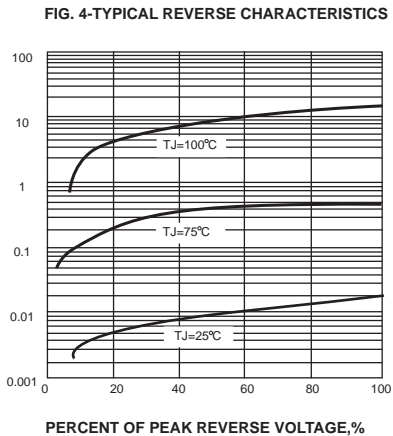
PEAK FORWARD SURGE CURRENT, AMPERES



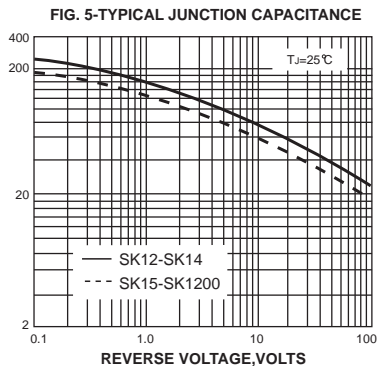
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

