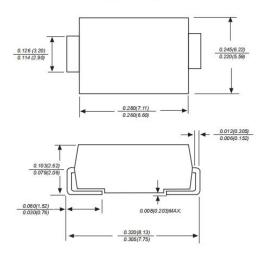


## **SK52 THRU SK5200**

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Amperes

#### DO-214AB



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: 260°C/10 seconds at terminals

#### **MECHANICAL DATA**

Case: JEDEC DO-214AB molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.007 ounce, 0.25grams

#### 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%.

	SYMBOLS	SK52	SK53	SK54	SK55	SK56	SK58	SK510	SK5150	SK5200	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	VOLTS
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	105	150	VOLTS
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	VOLTS
Maximum average forward rectified current	I(AV) 5.0									Amps	
at TL(see fig.1)	1(44)		2.0								
Peak forward surge current											
8.3ms single half sine-wave superimposed on	I <sub>FSM</sub>	150.0									Amps
rated load (JEDEC Method)											
Maximum instantaneous forward voltage at 5.0A	VF	0.55 0.70				0.85		0.95	Volts		
Maximum DC reverse current T <sub>A</sub> =25℃	0.5								2	mA	
at rated DC blocking voltage Ta=100℃	lR	20				10		2.0			
Typical junction capacitance (NOTE 1)	CJ	200									pF
Typical thermal resistance (NOTE 2)	Reja	50.0									°C/W
Operating junction temperature range	TJ,	-65 to +125 -65 to +150							°C		
Storage temperature range	Тѕтс	-65 to +150									°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

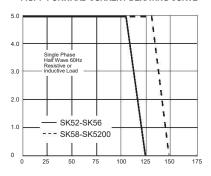
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

www.ndone.cn



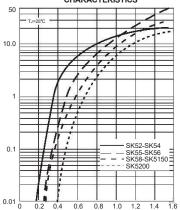
## **RATINGS AND CHARACTERISTIC CURVES SK52 THRU SK5200**

FIG. 1- FORWARD CURRENT DERATING CURVE



AMBIENT TEMPERATURE, C

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLEAGE, VOLTS

FIG. 5-TYPICAL JUNCTION CAPACITANCE

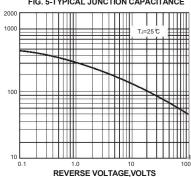
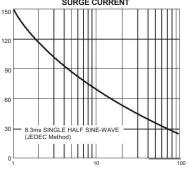
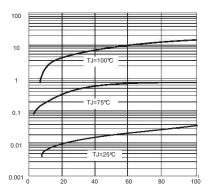


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



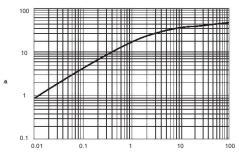
NUMBER OF CYCLES AT 60 Hz

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE,%

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.

www.ndone.cn

# 单击下面可查看定价,库存,交付和生命周期等信息

>>COMON(阔迈)