

# SK52 THRU SK5A0

## SURFACE MOUNT SCHOTTKY RECTIFIERS

### FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guard ring for overvoltage protection
- High temperature soldering guaranteed:  
250° C/10 seconds at terminals

### MECHANICAL DATA

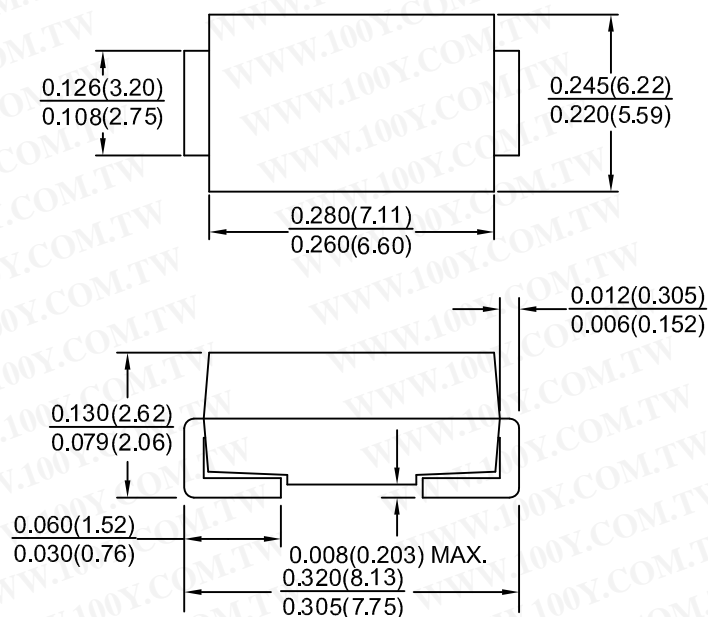
Case : JEDEC DO-214AB molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750 Method 2026

Polarity : Color band on body denotes cathode end

Weight : 0.007 ounce, 0.021 grams

### SMC/DO-214AB



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60 Hz resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	SK52	SK53	SK54	SK55	SK56	SK58	SK5A0	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current at TL (See figure 1)	$I_{(AV)}$	5.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100							Amps
Maximum Instantaneous forward voltage (NOTE 2) $I_F=5.0A$	$V_F$	0.55			0.70		0.85		Volts
Maximum Instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_c=25^\circ C$ $T_c=100^\circ C$	$I_R$	0.5 20							mA
Typical Junction Capacitance (NOTE 1)	$C_J$	550			400				P F
Operating temperature range	$T_J$	-65to+125							°C
Storage temperature range	$T_{Stg}$	-65to+125							°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4 VDC
2. Pulse test : 300 us pulse width, 1% duty cycle

**勝特力材料 886-3-5753170**  
**勝特力电子(上海) 86-21-54151736**  
**勝特力电子(深圳) 86-755-83298787**  
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# RATINGS AND CHARACTERISTIC CURVES SK52 THRU SK5A0

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

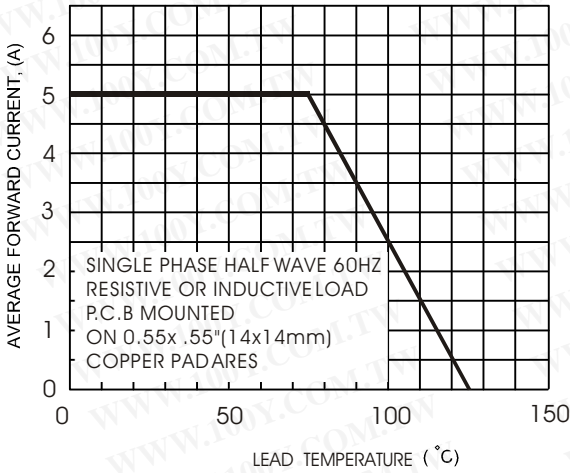


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

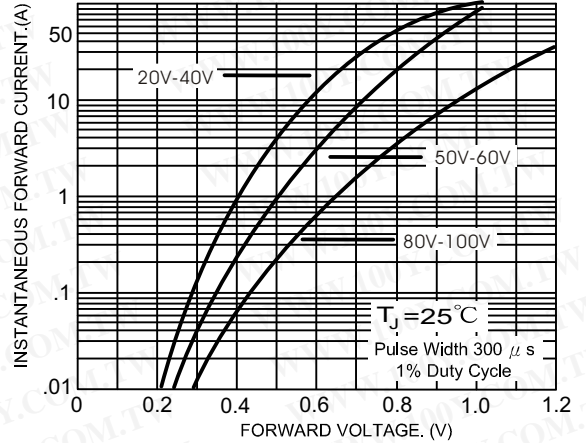


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

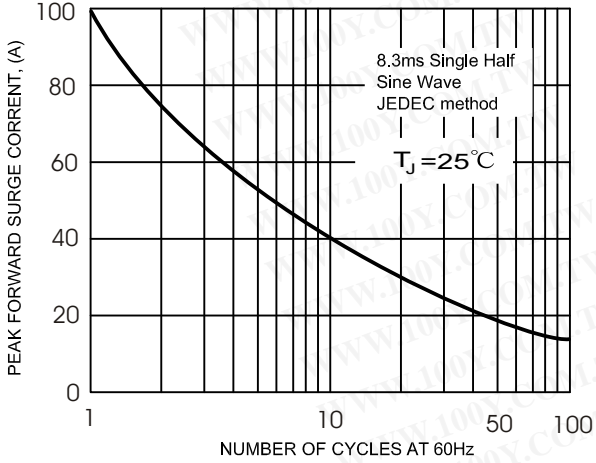


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

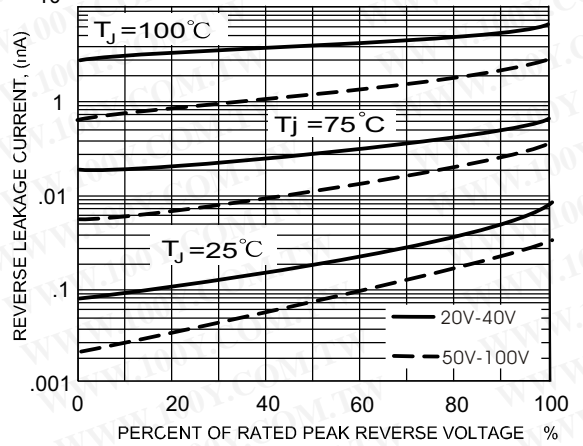
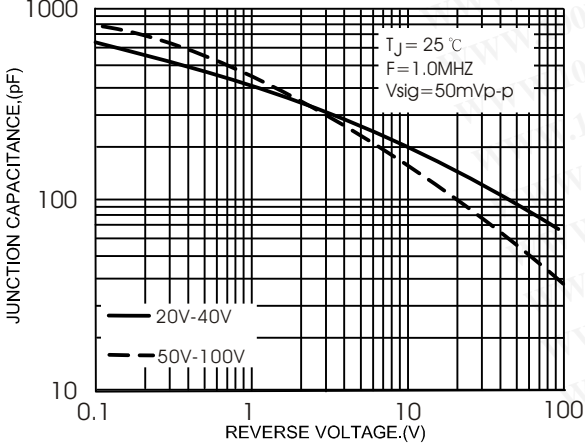


FIG.4 - TYPICAL JUNCTION CAPACITANCE



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