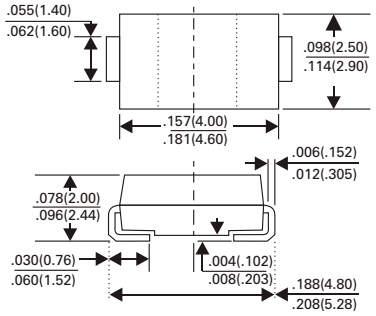
SK52 thru SK56

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 60 VOLTS CURRENT - 5.0 AMPERES

SMA/DO-214AC



Dimensions in inches and (millimeters)

FEATURES

- Low profile package
- Ideal for automated placement
- Guard Ring for over voltage protection
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

MECHANICAL DATA

- Case: DO-214AC (SMA)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.062 grams (approximate)

MAXIMUM RATINGS (at T_A=25°C unless otherwise noted)

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

PARAMETER	SYMBOL	SK52	SK53	SK54	SK55	SK56	UNIT
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	I_F	5.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120.0					A
Maximum instantaneous I_F=5A @ 25°C	V_F	0.55			0.70		V
Maximum DC reverse current @ TA=25°C	I_R	0.5					mA
at rated DC blocking voltage @ TA=100°C		10.0					
Typical junction capacitance	C_J	300			210		pF
Typical thermal resistance	$R_{\theta JA}$	50					°C/W
	$R_{\theta JC}$	30					
Operating temperature range	T_J	-55 to +125					°C
Storage temperature range	T_{STG}	-55 to +150					°C

NOTES :

1. Measured at 1.0MHz and Applied Reverse Voltage OF 4.0V
2. P.C.B Mounted 0.55″ x 0.55″ (14x14mm) 0.013mm Thick Copper Pad Areas
3. SMA Package Suffix " A" ,SMB Package Suffix " B" ,SMC NO Suffix

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

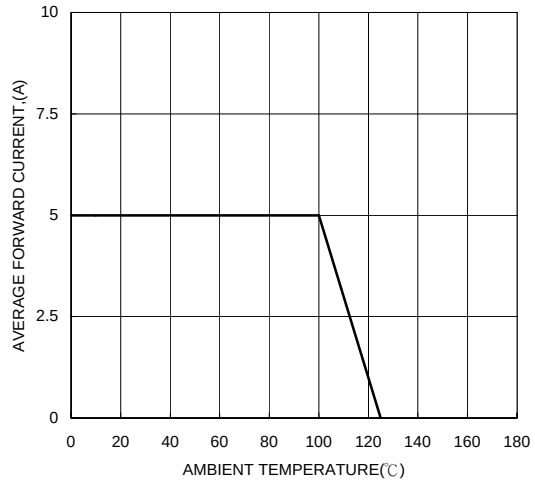

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

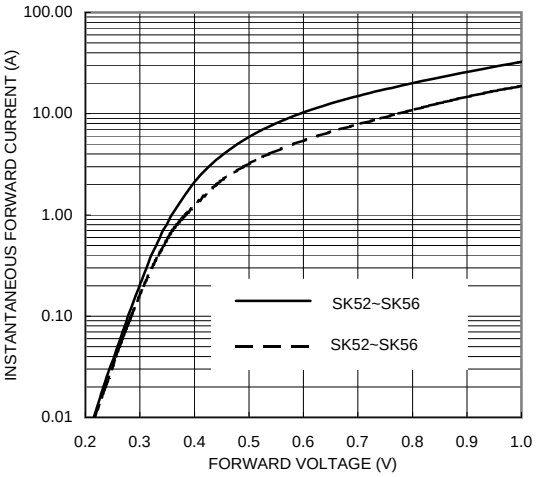

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

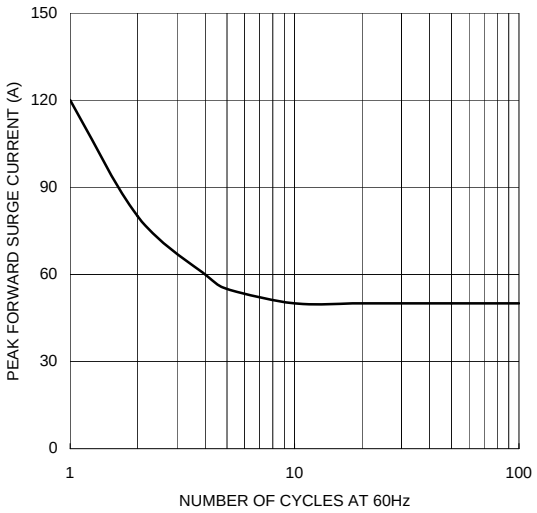

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

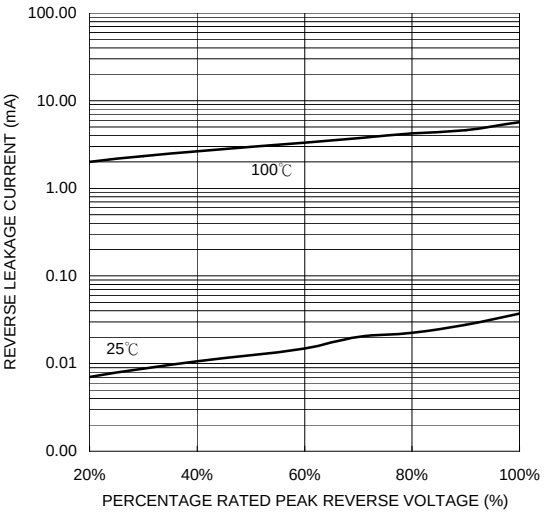

FIG. 5-TYPICAL JUNCTION CAPACITANCE