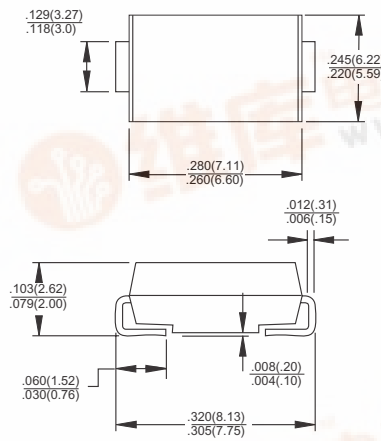


TSC 9b	SK53C THRU SK56C 5.0 AMPS. Surface Mount Schottky Barrier Rectifiers				
	Voltage Range 30 to 60 Volts Current 5.0 Amperes				
Features ✧ For surface mounted application ✧ Metal to silicon rectifier, majority carrier conduction ✧ Low forward voltage drop ✧ Easy pick and place ✧ High surge current capability ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0 ✧ Epitaxial construction ✧ High temperature soldering: 260°C / 10 seconds at terminals	SMC/DO-214AB  Dimensions in inches and (millimeters)				
Mechanical Data ✧ Case: Molded plastic ✧ Terminals: Solder plated ✧ Polarity: Indicated by cathode band ✧ Packaging: 16mm tape per EIA STD RS-481 ✧ Weight: 0.21 gram					
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%					
Type Number	Symbol	SK53C	SK54C	SK56C	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	40	60	V
Maximum RMS Voltage	V _{RMS}	21	28	42	V
Maximum DC Blocking Voltage	V _{DC}	30	40	60	V
Maximum Average Forward Rectified Current at T _L (See Fig. 1)	I _(AV)	5.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	100			A
Maximum Instantaneous Forward Voltage (Note 1) @ 5.0A	V _F	0.55		0.75	V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	I _R	0.5			mA
		20		10	mA
Typical Thermal Resistance (Note 2)	R _{θJC}	17			°C/W
	R _{θJA}	55			
Operating Temperature Range	T _J	-55 to +125		-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

2. Measured on P.C.Board with 0.6 x 0.6" (16 x 16mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (SK53C THRU SK56C)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

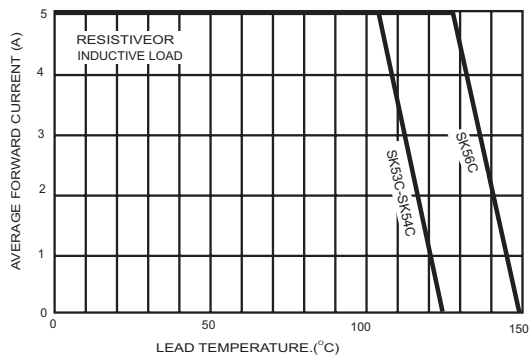


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

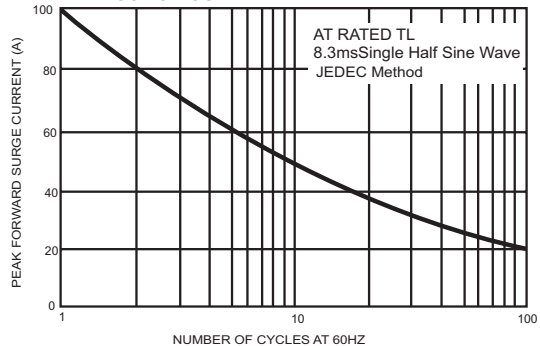


FIG.3-TYPICAL FORWARD CHARACTERISTICS

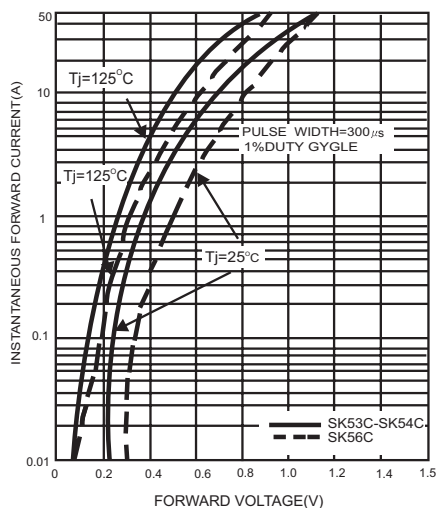


FIG.4-TYPICAL REVERSE CHARACTERISTICS

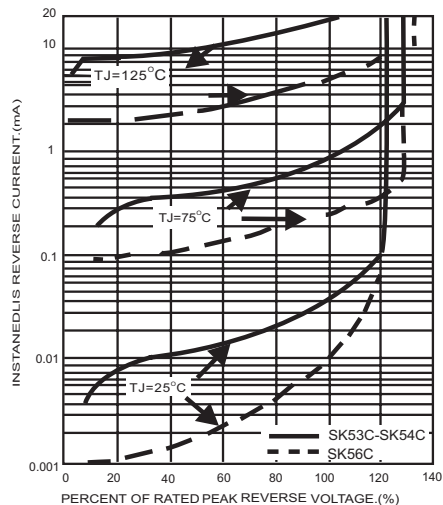


FIG.5-TYPICAL JUNCTION CAPACITANCE

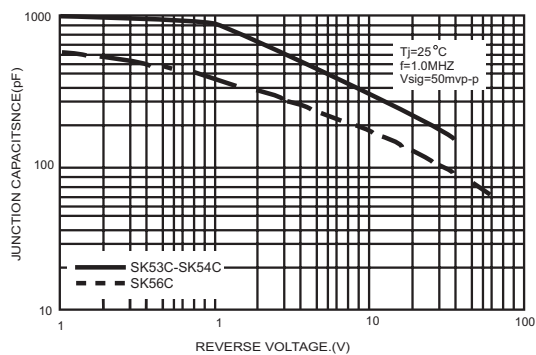


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

