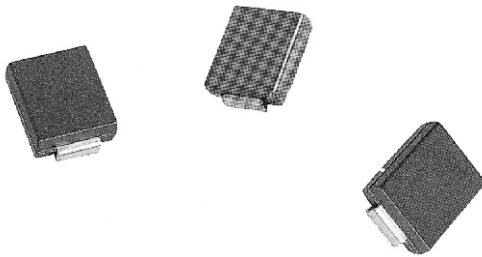


SK52 thru SK56

MINIATURE SCHOTTKY BARRIER RECTIFIER



**CHENG-YI
ELECTRONIC**



FEATURES

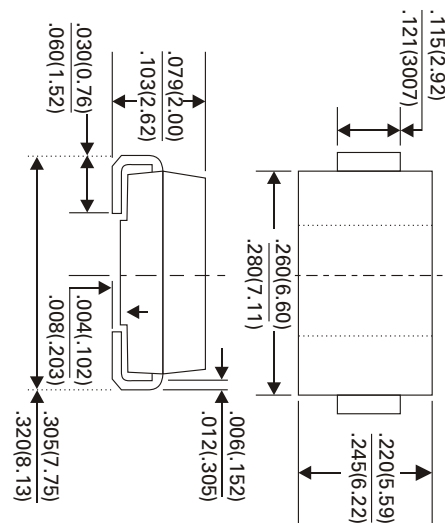
- Low switching noise
- Low forward voltage drop
- High current capability
- High switching capability
- High reliability
- High surge capability

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: MIL-STD-202 method 208 guaranteed
- Mounting position: Any

VOLTAGE RANGE
20 TO 80 Volts
CURRENT
5.0 Amperes

DO-214AB



SMC

MAXIMUM RATINGS (At $T_A=25^{\circ}\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	SK52	SK53	SK54	SK55	SK56	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	Volts	
Maximum Average Forward Rectified Current .375" (9.5mm) lead length	I_o	5.0						Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150						Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	18						$^{\circ}\text{C} / \text{W}$
Typical Junction Capacitance (Note 2)	C_J	0.2						nF
Operating Temperature Range	T_J	-65 to +125			-65 to +150			$^{\circ}\text{C}$
Storage and Operating Temperature Range	T_{STG}	-65 to +150						$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A=25^{\circ}\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	SR502	SR503	SR504	SR505	SR506	UNITS
Maximum Instantaneous Forward Voltage at 5.0A DC	V_F	.57			.70		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	10					mAmps

@ $T_A=25^{\circ}\text{C}$

Notes : 1. Thermal Resistance (Junction to Ambient) : Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

SK52 thru SK56

MINIATURE SCHOTTKY BARRIER RECTIFIER



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RATING AND CHARACTERISTICS CURVES SK52 THRU SK56

Fig.1 - TYPICAL FORWARD CHARACTERISTICS

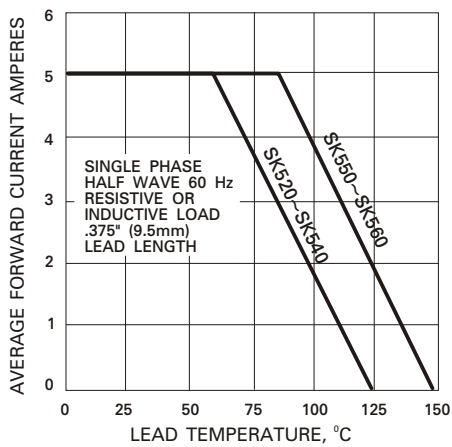


Fig.2 - TYPICAL REVERSE CHARACTERISTICS

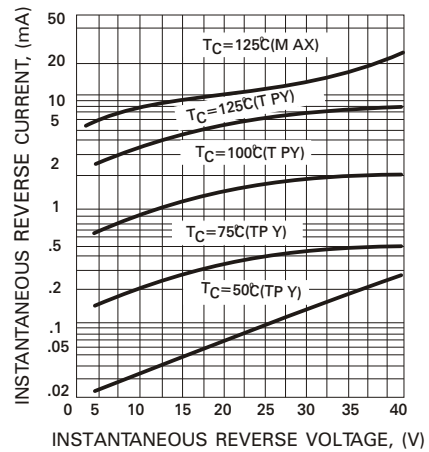


Fig.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

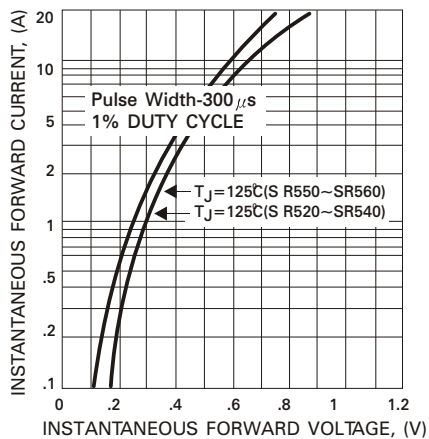


Fig.4 - TYPICAL JUNCTION CAPACITANCE

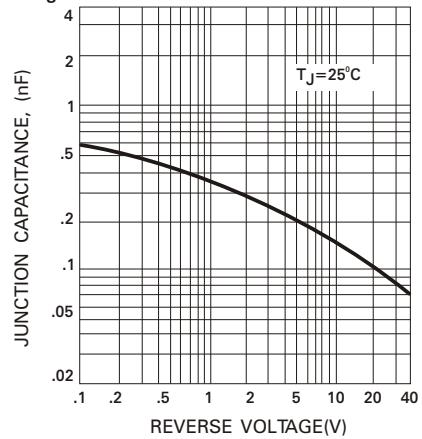


Fig.5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

