

SK' 4L

LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 Volts Forward Current - 5.0Amperes

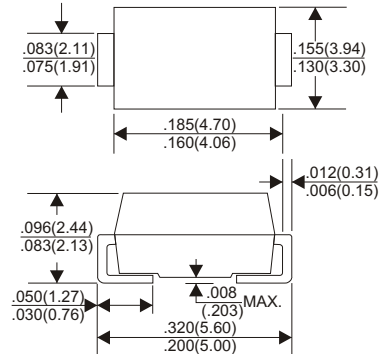


FEATURES

- Very low forward voltage:0.45V
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Low profile package
- built-in strain relief ,ideal for automated placement
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260 C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC
- * Lead Free Finish/RoHS Compliant



SMB(DO-214AA)



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.1066gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	SK' 4L	Volts
Maximum repetitive peak reverse voltage	V_{RRM}	40	Volts
Maximum RMS voltage	V_{RMS}	28	Volts
Maximum DC blocking voltage	V_{DC}	40	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (See Fig.1)	$I_{(AV)}$	5.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	10	Amps
Maximum instantaneous forward voltage at 0.1 A(Note 1)	V_F	0.45	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A = 25^\circ C$	1.0	mA
	$T_A = 100^\circ C$	50	
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55.0	°C/W
	$R_{\theta JL}$	17.0	
Operating junction temperature range	T_J	-65 to+150	°C
Storage temperature range	T_{STG}	-65 to+150	°C

Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle

2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm)copper pad areas

3. Measured at 1MHz and reverse voltage of 4.0volts

RATINGS AND CHARACTERISTIC CURVES SK34L

FIG.1-FORWARD CURRENT DERATING CURVE

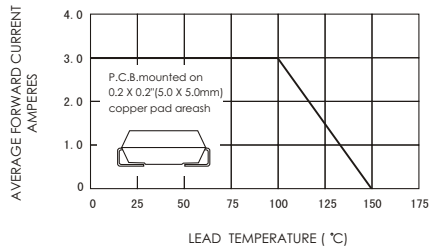


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

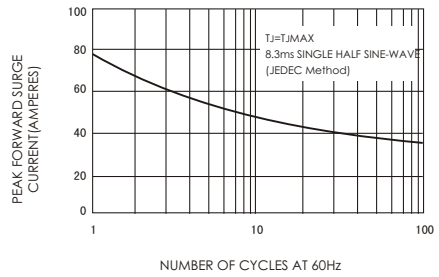


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

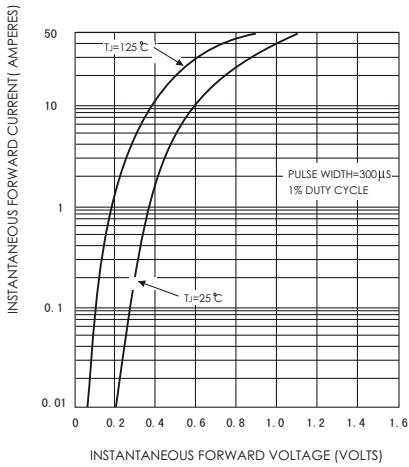


FIG.4-TYPICAL REVERSE CHARACTERISTICS

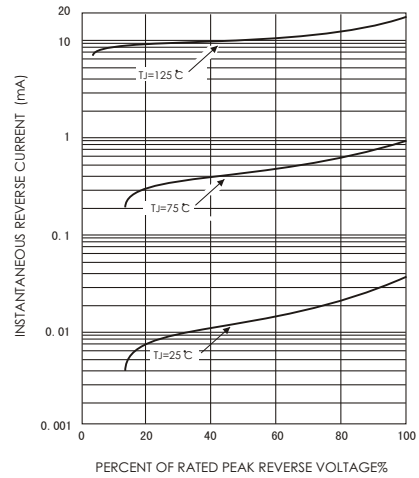


FIG.5-TYPICAL JUNCTION CAPACITANCE

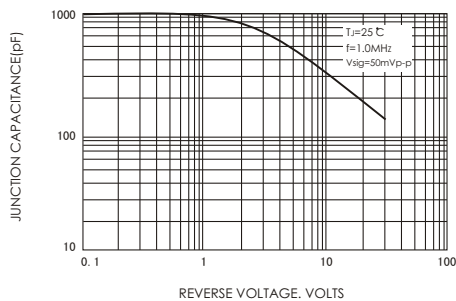


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

