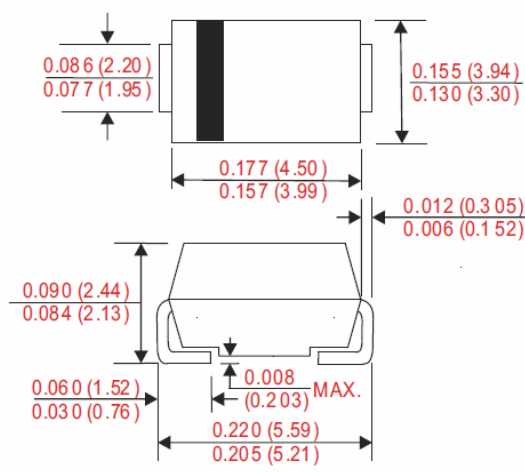


# SK22B THRU SK220B

2 Amperes Surface Mount Schottky Barrier Rectifiers  
VOLTAGE : 20 TO 200Volts

Features	Outline
<ul style="list-style-type: none"> <li>• Low profile surface mounted application in order to optimize board space.</li> <li>• Low power loss, high efficiency.</li> <li>• High current capability, low forward voltage drop.</li> <li>• High surge capability.</li> <li>• Guardring for overvoltage protection.</li> <li>• Ultra high-speed switching.</li> <li>• Silicon epitaxial planar chip, metal silicon junction.</li> <li>• Suffix "G" indicates Halogen-free part, ex. SK22BG.</li> <li>• Lead-free parts meet environmental standards of MIL-STD-19500 /228</li> </ul>	<p>SMB(DO-214AA)</p>  <p>Dimensions in inches and (millimeters)</p>
Mechanical data	
<ul style="list-style-type: none"> <li>• Epoxy:UL94-V0 rated flame retardant</li> <li>• Case : Molded plastic, DO-214AA / SMB</li> <li>• Terminals : Solder plated, solderable per MIL-STD-750, Method 2026</li> <li>• Polarity : Indicated by cathode band</li> <li>• Weight : 0.003 ounce, 0.091 gram</li> </ul>	

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	SK22B	SK24B	SK26B	SK210B	SK215B	SK220B	UNIT
Making code		SK22	SK24	SK26	SK210	SK215	SK220	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	28	42	70	105	140	
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	100	150	200	
Maximum Instantaneous Forward Voltage@2.0A, $T_A = 25^\circ\text{C}$	$V_F$	0.45	0.50	0.70	0.81	0.87	0.90	V
Operating Temperature	$T_J$	-50 ~ +125			-50 ~ +150			°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	$I_o$			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$			50	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	$I_R$			0.5	mA
	$V_R = V_{RRM}$ $T_A = 100^\circ\text{C}$				20	
Thermal resistance	Junction to ambient	$R_{BJA}$		50		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	$C_J$		30		pF
Storage temperature		$T_{STG}$	-50		+150	°C

**Rating and characteristic curves**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

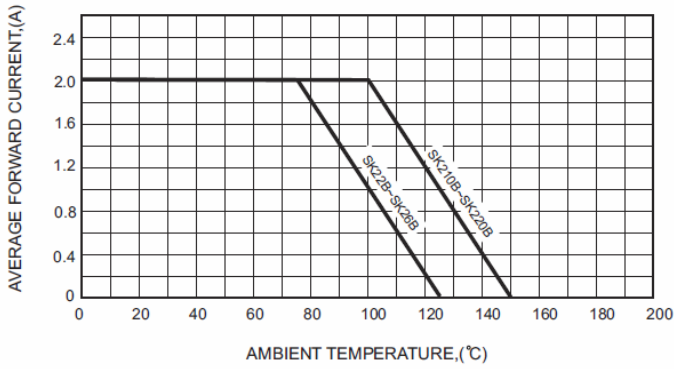


FIG.2-TYPICAL FORWARD CHARACTERISTICS

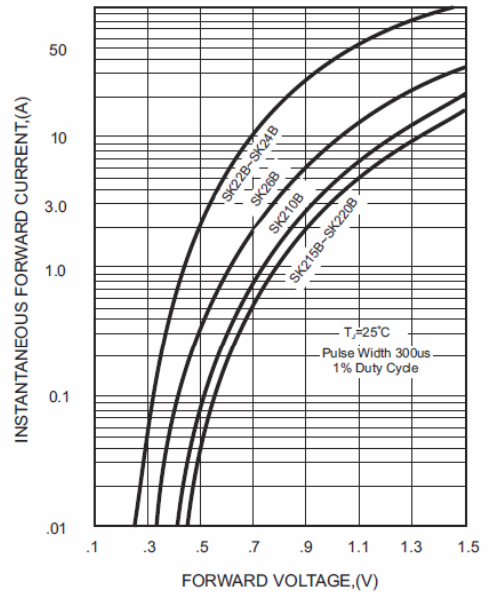


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

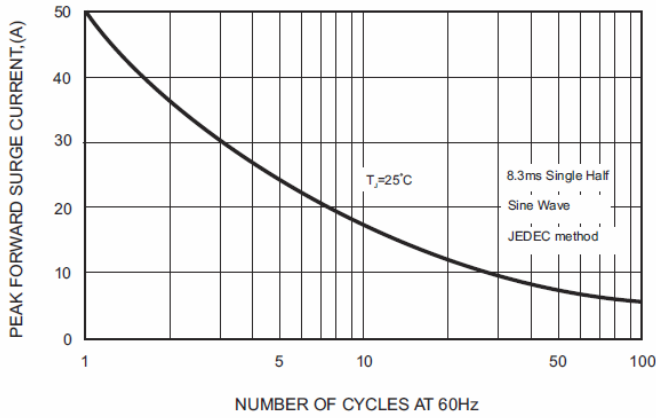


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

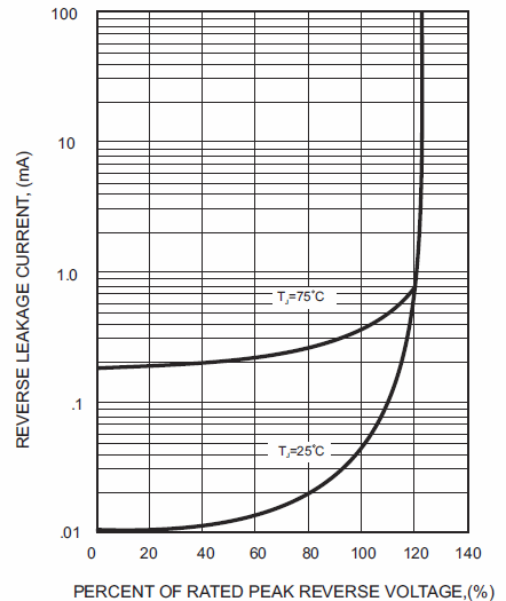


FIG.4-TYPICAL JUNCTION CAPACITANCE

