



Data Sheet

Customer :

Product : Small Signal Schottky Diode-Standard

Part No.: SK22B/SK24B/SK26B/SK210B/SK215B/SK220B

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2 Amperes Surface Mount Schottky Barrier Rectifiers

Voltage : 20 to 200Volts

Features

- Low profile surface mounted application in order to optimize board space
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guardring for overvoltage protection
- Ultra high-speed switching
- Silicon epitaxial planar chip, metal silicon junction
- Lead-free parts meet environmental standards of MIL-STD-19500/228
- Halogen free



Mechanical Data

Epoxy : UL94-V0 rated flame retardant

Case : Molded Plastic, DO-214AA/SMB

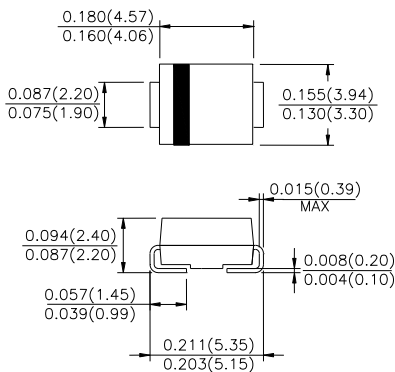
Terminals : Solder plated, Solderable per MIL-STD-750, Method 2026

Polarity : Indicated by cathode band

Weight : 0.003 ounce, 0.091 gram

Packaging : 0.5Kpcs per 7" reel
3Kpcs per 13" reel

Package Dimensions in inches(millimeters): DO-214AA/SMB



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
Marking 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	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	100	150	200	V
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	$R_{\theta JA}$		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

Rated and Characteristic Curve

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

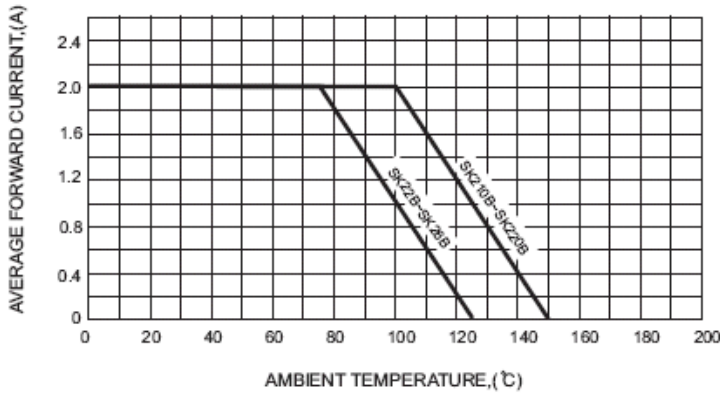


FIG.2-TYPICAL FORWARD CHARACTERISTICS

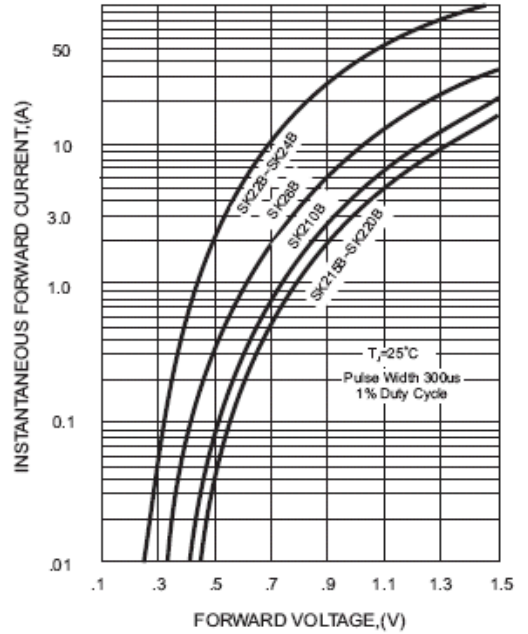


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

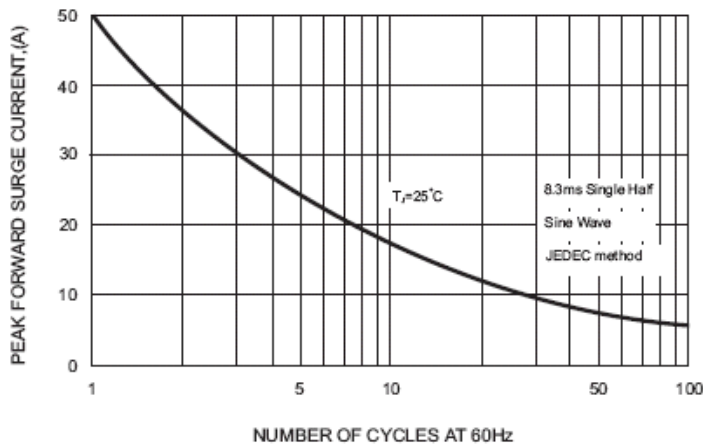


FIG.4-TYPICAL JUNCTION CAPACITANCE

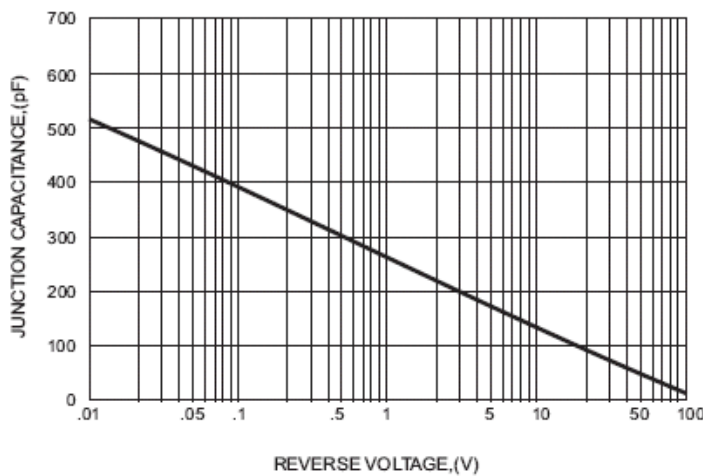


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

