

SK22 THRU SK210

Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 100 V

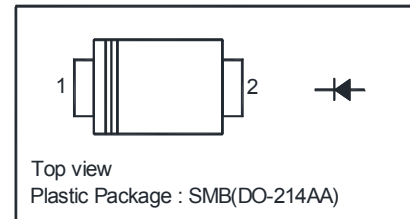
Forward Current - 2 A

Features

- The plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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
- **Mounting position:** Any

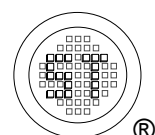
Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave 60 Hz, resistive or inductive load; For capacitive load current derate by 20%.

Parameter	Symbols	SK22	SK23	SK24	SK25	SK26	SK28	SK210	Unit	
	Marking	SK22	SK23	SK24	SK25	SK26	SK28	SK210	-	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2							A	
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A	
Maximum Instantaneous Forward Voltage at 2 A	V_F	0.55			0.70		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^\circ\text{C}$ $T_a = 100\text{ }^\circ\text{C}$	I_R	0.5					0.1			mA
		10					5			
Typical Junction Capacitance ¹⁾	C_J	220			180				pF	
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	68							°C/W	
Operating Junction Temperature Range	T_J	- 55 to + 125			- 55 to + 150				°C	
Storage Temperature Range	T_{stg}	- 55 to + 150							°C	

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V.

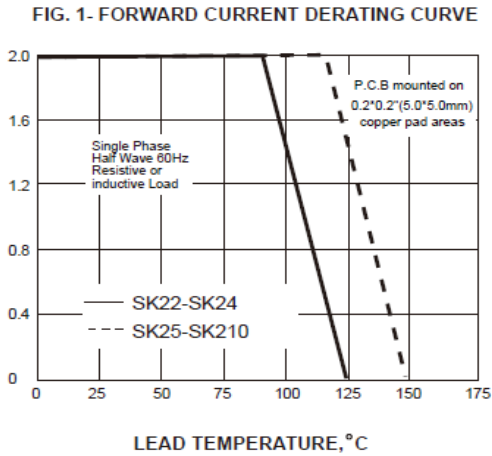
²⁾ P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.



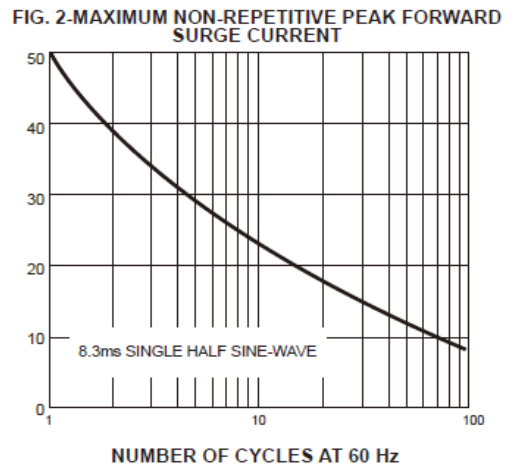
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Electrical characteristic curves

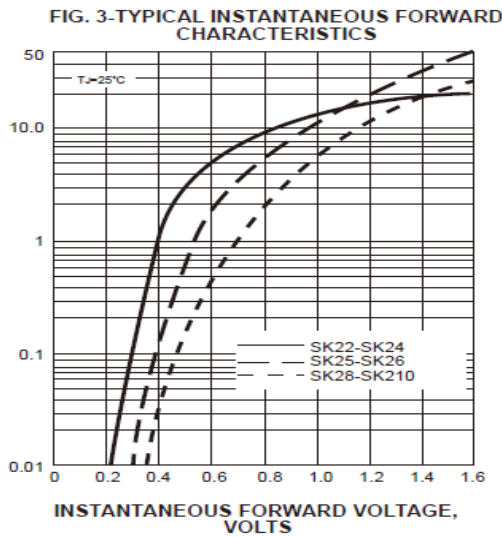
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



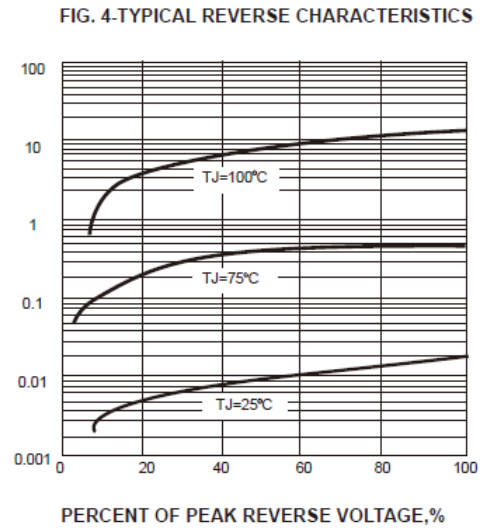
PEAK FORWARD SURGE CURRENT, AMPERES



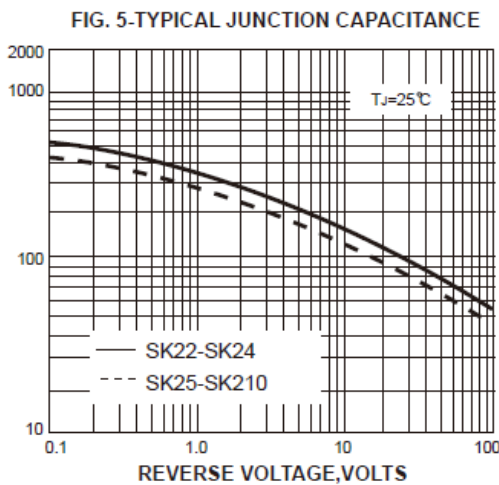
INSTANTANEOUS FORWARD CURRENT, AMPERES



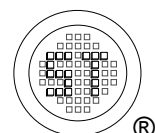
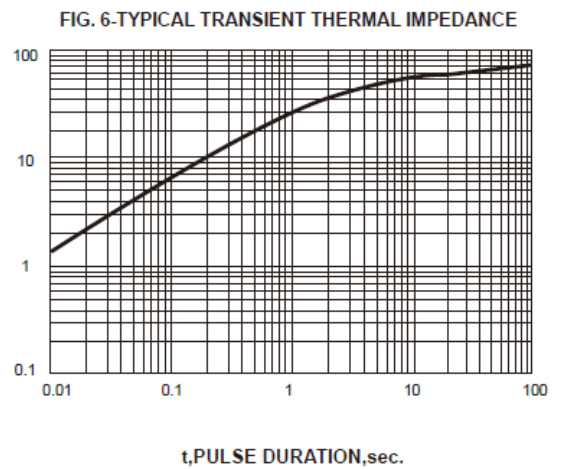
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



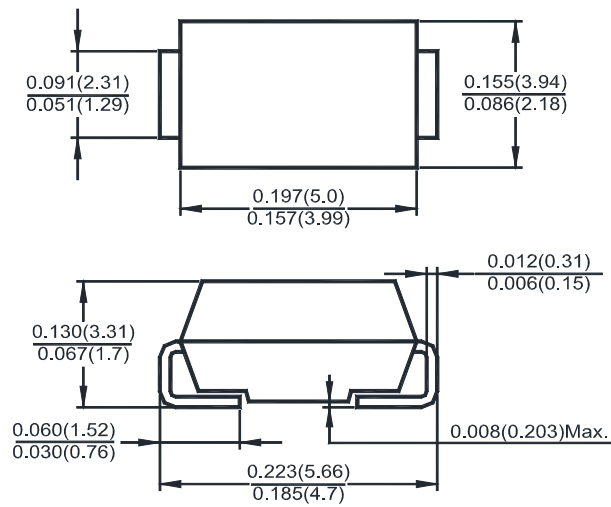
TRANSIENT THERMAL IMPEDANCE, °C/W



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Package Outline Dimensions in inches (millimeters)

SMB(DO-214AA)



Marking information

" ***** " = Part No.

" III " = Cathode line

Font type: Arial

