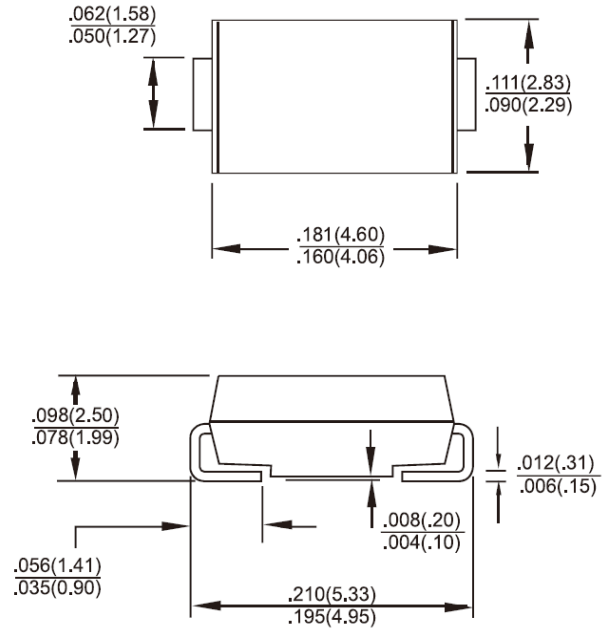




SK22A - SK215A
2.0AMPS. Surface Mount Schottky Barrier Rectifier
SMA/DO-214AC

Features

- ✧ For surface mounted application
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low forward voltage drop
- ✧ Easy pick and place
- ✧ High surge current capability
- ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering: 260°C /10 seconds at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminal: Pure tin plated, lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 12 mm tape per EIA STD RS-481
- ✧ Weight: 0.067 grams

Dimensions in inches and (millimeters)

Marking Diagram



- SK2XA = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	SK 22A	SK 23A	SK 24A	SK 25A	SK 26A	SK 29A	SK 210A	SK 215A	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	V	
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{F(AV)}$	2								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	50								A	
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	V_F	0.50			0.70		0.85		0.95	V	
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=100^\circ C$ @ $T_A=125^\circ C$	I_R	0.5					0.1				mA
		10			5		-				mA
		-					2.0				mA
Non-repetitive Peak Reverse Avalanche Energy $L=40mH$ $T_a=25^\circ C$ max prior to surge, Inductive load switch off	E_{RSM}	20								mJ	
Typical Junction Capacitance	C_j	130					50				pF
Typical Thermal Resistance	$R_{\theta JA}$	88								$^\circ C/W$	
Operating Temperature Range	T_J	- 65 to + 125				- 65 to + 150					$^\circ C$
Storage Temperature Range	T_{STG}	- 65 to + 150								$^\circ C$	

Note 1: Pulse Test with PW=300u sec, 1% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (SK22A THRU SK215A)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

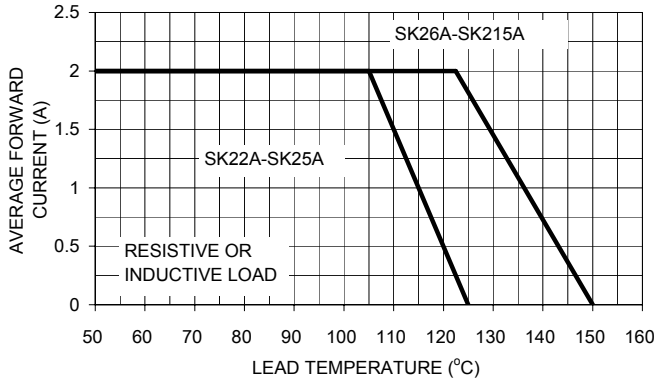


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

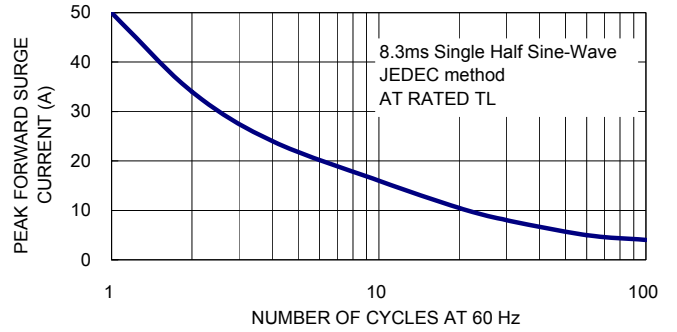


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

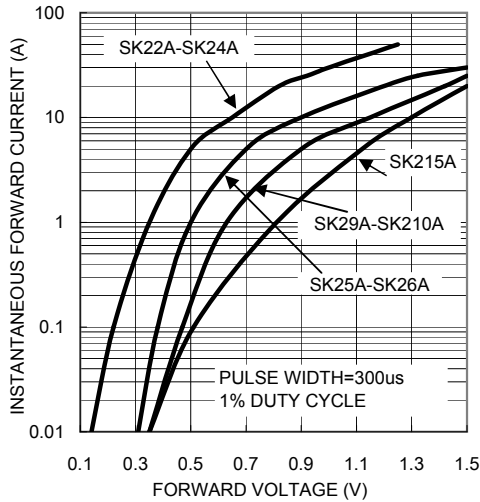


Fig. 4- TYPICAL REVERSE CHARACTERISTICS

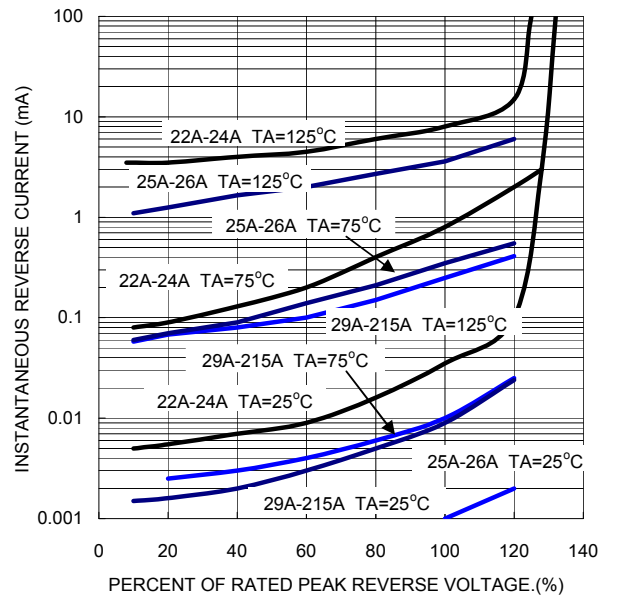


FIG. 5- TYPICAL JUNCTION CAPACITANCE

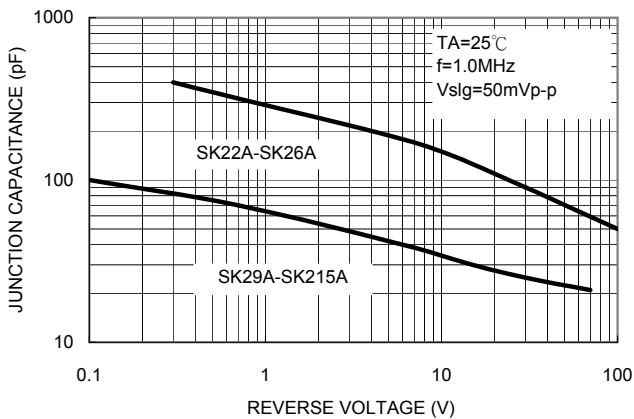


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

