

Pb Free Plating Product

SK102 thru SK1020



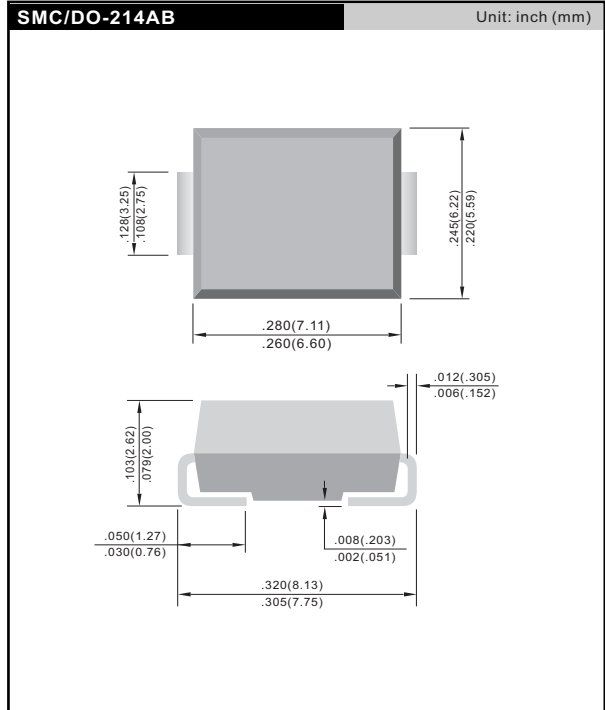
10.0 Ampere Surface Mount Schottky Barrier Rectifier

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

Mechanical Data

- ◇ Case: Molded plastic
- ◇ Terminals: Pure tin plated, lead free.
- ◇ Polarity: Indicated by cathode band
- ◇ Packaging: 16mm tape per EIA STD RS-481
- ◇ Weight: 0.1 gram



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 102	SK 103	SK 104	SK 105	SK 106	SK 109	SK 1010	SK 1020	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	200	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	10.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150								A
Maximum Instantaneous Forward Voltage @10A	V_F	0.55		0.7		0.85		0.95		V
Maximum D.C. Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=125^\circ C$	I_R	0.5				0.1				mA
		15		10		5.0			mA	
Typical Junction Capacitance (Note 2)	C_j	400			300			250		pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	4.0								°C/W
Operating Junction Temperature Range	T_J	-65 to +125				-65 to +150				°C
Storage Temperature Range	T_{STG}	-65 to +150								°C

Notes: 1. Thermal Resistance from Junction to Case Per Leg WITH Heat sink (2"x3"x0.25") Al-plate.
 2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES(SK102 thru SK1020)

