

SK520C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 200 V

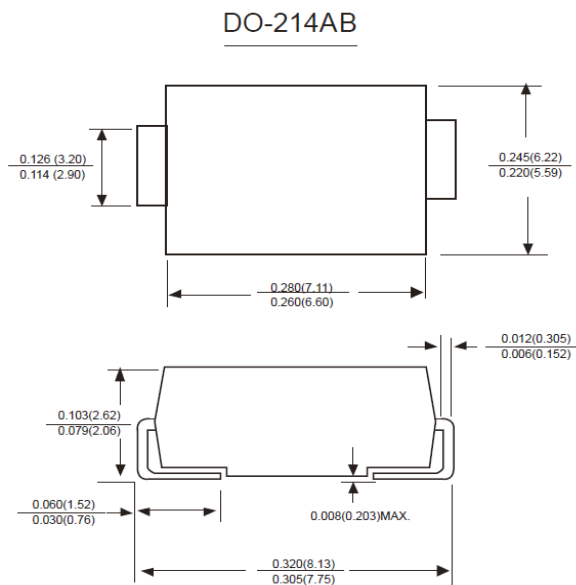
Forward Current - 5 A

Features

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

Mechanical Data

- Case:** JEDEC DO-214AB molded plastic body
- Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity:** Color band denotes cathode end
- Mounting position:** Any



Dimensions in inches and (millimeters)

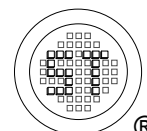
Maximum Ratings and Electrical Characteristics

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	SK520C	Unit
	Marking	SK520C	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	170	A
Maximum Instantaneous Forward Voltage ¹⁾ at $I_F = 5$ A	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	I_R	0.2 2	mA
Thermal Resistance, Junction to Ambient ¹⁾	$R_{\theta JA}$	50	$^\circ\text{C/W}$
Typical junction capacitance ²⁾	C_J	200	pF
Operating and Storage Temperature Range	T_J, T_{stg}	- 55 to + 125	$^\circ\text{C}$

¹⁾ P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

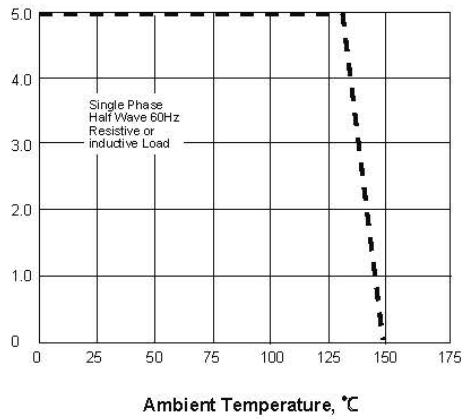
²⁾ Measured at 1MHz and applied reverse voltage of 4.0V D.C.



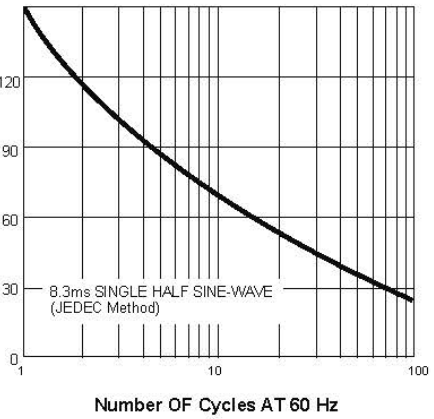
SEMTECH

Dated: 25/11/2016 TL Rev:02

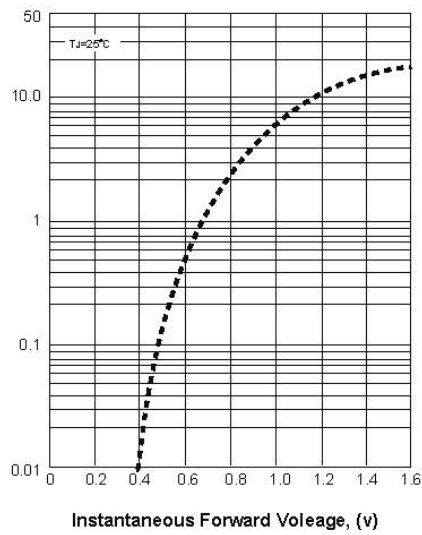
Average Forward Rectified Current, (A)



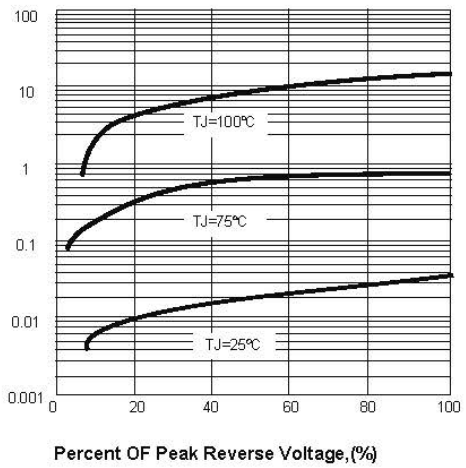
Peak Forward Surge Current, (A)



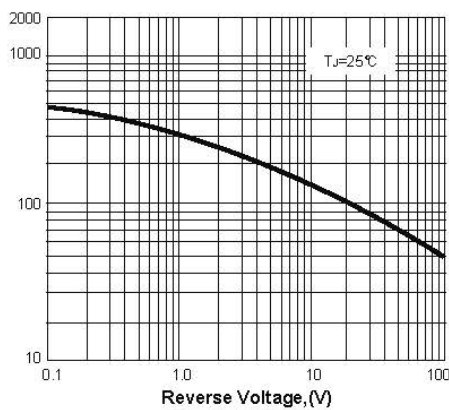
Instantaneous Forward Current, (A)



Instantaneous Reverse Current, (mA)



Junction Capacitance, pF



Transient Thermal Impedance, ($^\circ\text{C}/\text{W}$)

