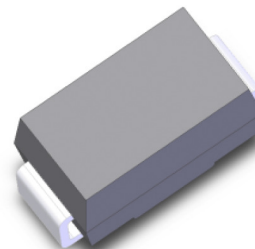


Features

- Schottky barrier diodes
- Low forward voltage drop
- High Junction Temperature
- Moisture sensitivity: level 1, per J-STD-020
- Add suffix "E" for Halogen Free
- Halogen-free according to IEC 61249-2-21 definition
- AEC-Q101 qualified
- Add prefix "M" for Automotive Electronics Products
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



DO-214AC(SMA)

Typical Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

Maximum Ratings (TA = 25 °C unless otherwise noted)						
Parameter	Symbol	SK17	SK18	SK19	SK1B	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	70	80	90	100	V
Maximum RMS voltage	V _{RMS}	42	56	63	70	V
Maximum DC blocking voltage	V _{DC}	70	80	90	100	V
Maximum average forward rectified current	I _{F(AV)}	1.0				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30				A
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 150				°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)							
Parameter	Test Conditions	Symbol	SK17	SK18	SK19	SK1B	Unit
Maximum instantaneous forward voltage	I _F =1A, T _A =25°C	V _F	0.79				V
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C	I _R	0.03				mA
	T _A =125°C		2				
Typical junction capacitance	4.0 V, 1 MHz	C _J	30				pF

Thermal Characteristics						
Parameter	Symbol	SK17	SK18	SK19	SK1B	Unit
Typical thermal resistance ⁽¹⁾	R _{θJA}	85				°C/W
	R _{θJC}	46				
	R _{θJL}	25				

Note1: Thermal resistance from junction to lead, mounted on PCB with 5.0×5.0mm copper pads

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

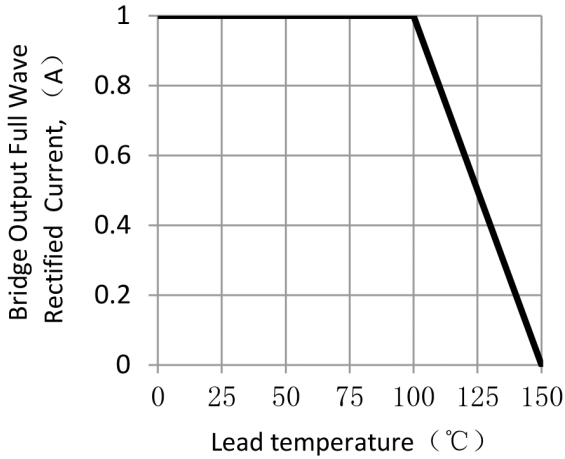


Figure 1. Forward Current Derating Curve

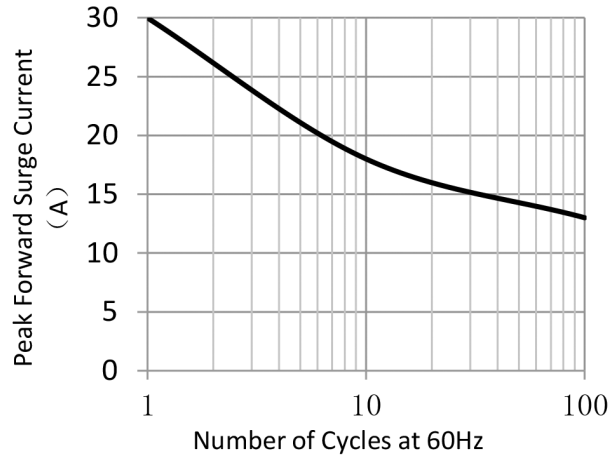


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

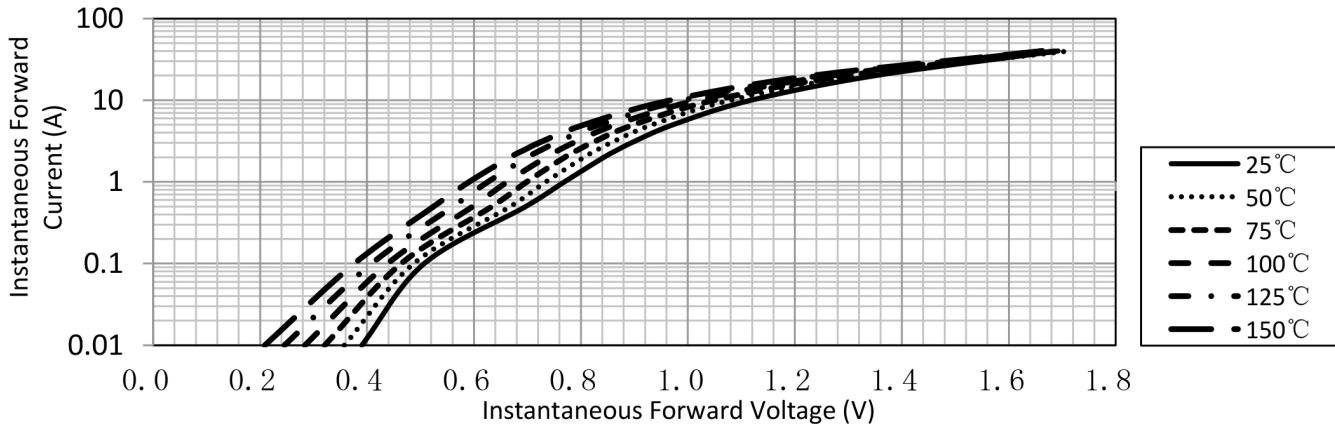


Figure 3. Typical Instantaneous Forward Characteristics

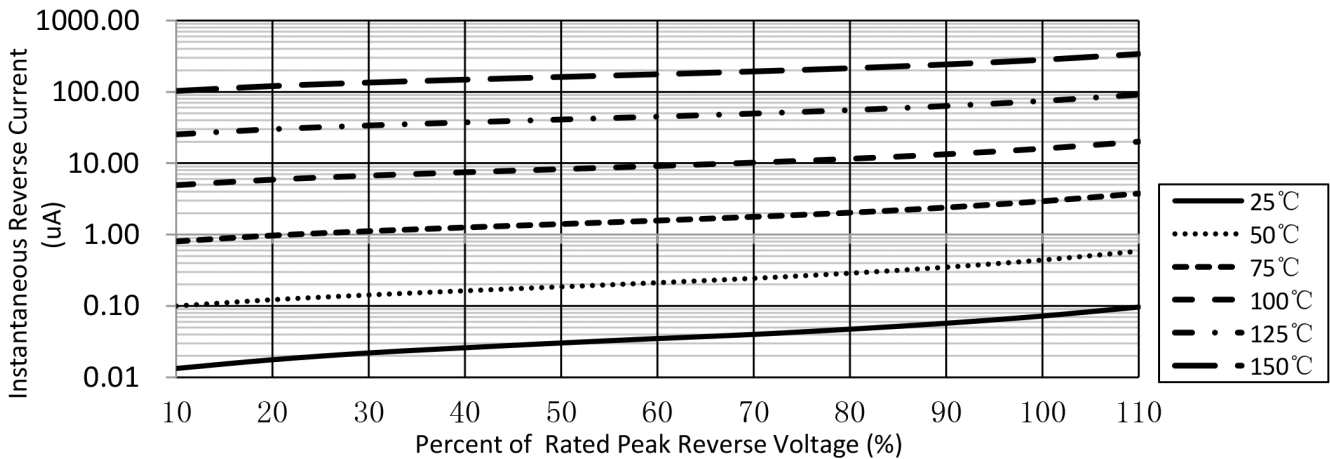
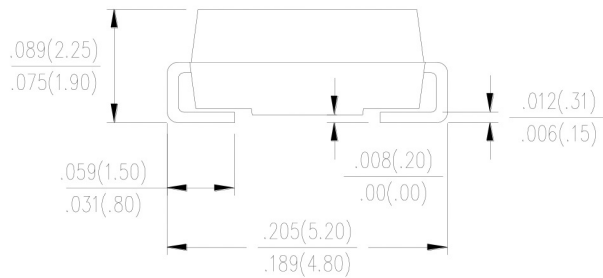
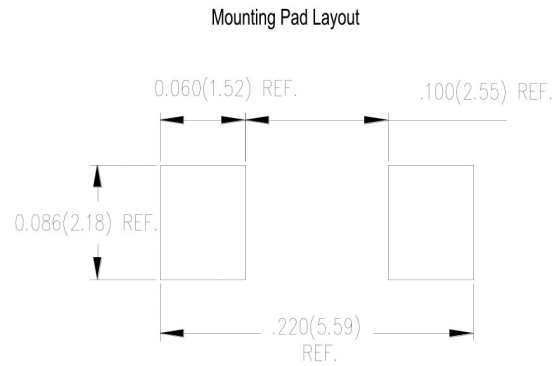
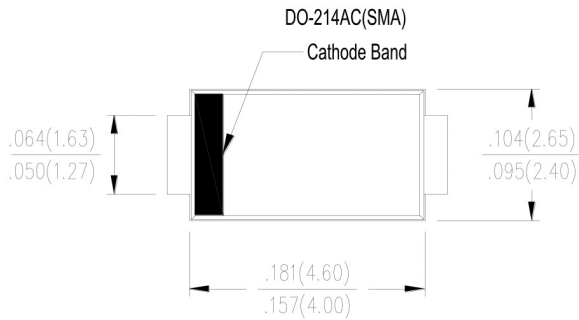


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions

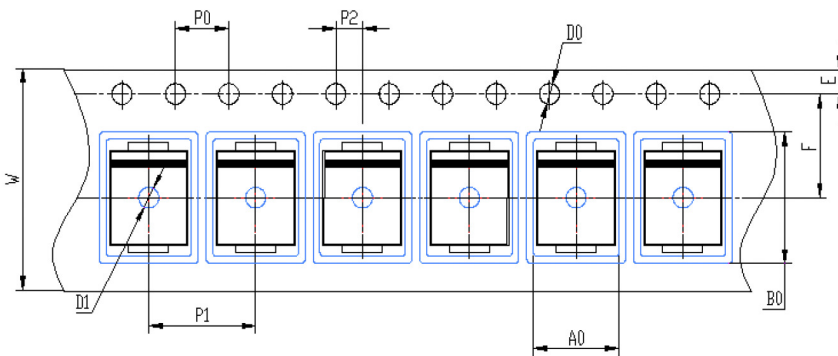
in inches (millimeters)



Packing Information

7500 pcs/Reel, 18 Reels/Box; 12mm Tape, 13" Reel

Tape & Reel Specification



Symbols	SMA(mm)
W	12 ± 0.2
E	1.75 ± 0.1
F	5.5 ± 0.05
D0	1.5 ± 0.1
D1	1.50 +0.1/-0
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
A0	2.65 ± 0.1
B0	5.25 ± 0.1