

Features

- Low forward voltage drop
- High Junction Temperature
- Moisture sensitivity: level 1, per J-STD-020
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



Package: DO-214AB (SMC)

Applications

- Low voltage, high frequency inverters
- Free wheeling
- Polarity protection

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	SK82	SK83	SK84	SK85	SK86	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current	I _{F(AV)}	8.0					A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed On Rated Load	I _{FSM}	175					A
Operating Junction and Storage Temperature Range	T _{STG}	- 55 to +150					°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	SK82	SK83	SK84	SK85	SK86	Unit
Maximum Instantaneous Forward Voltage	I _F =8A, T _A =25°C	V _F	0.55	0.55	0.55	0.7	0.7	v
Maximum DC Reverse Current at rated DC Blocking Voltage	T _A =25°C	I _R	0.2	0.2	0.2	0.15	0.15	mA
	T _A =100°C		5					
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	470					pF

Typical Electrical and Characteristics Curves

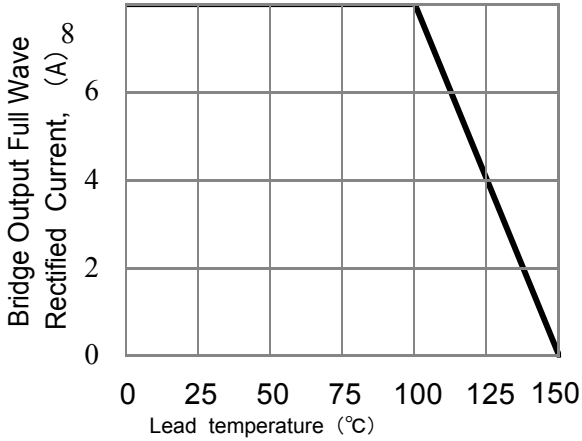


Fig 1. Forward Current Derating Curve

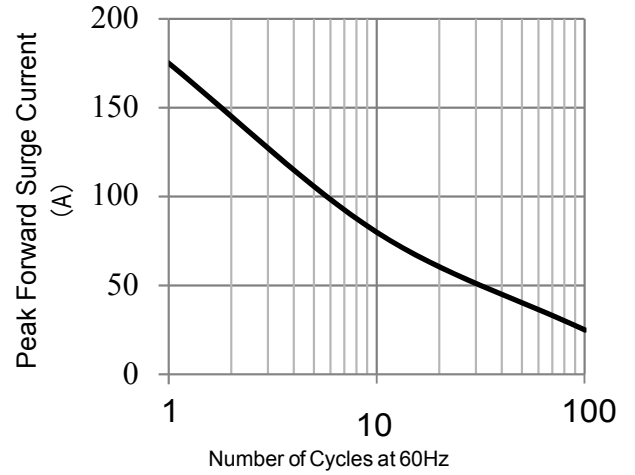


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current

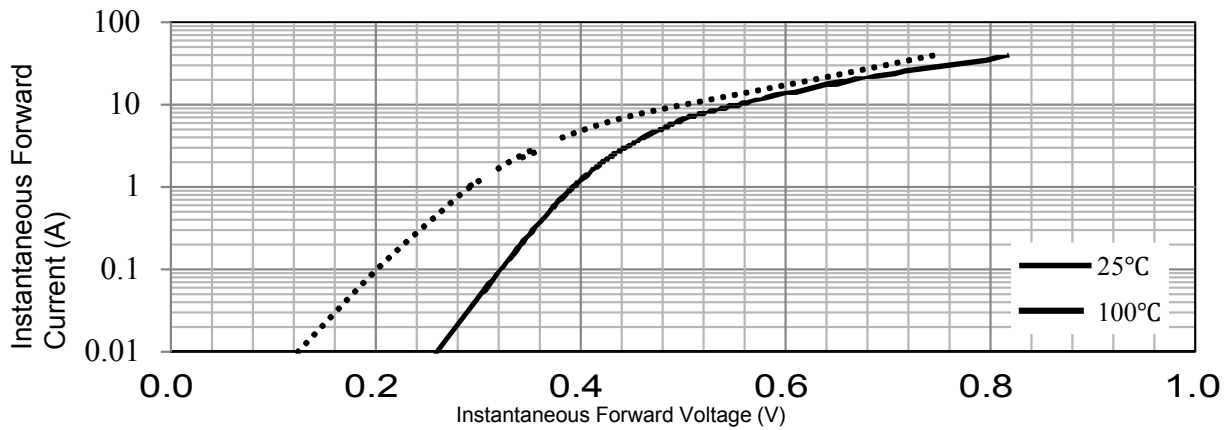


Fig 3. Typical Instantaneous Forward Characteristics (SK82 thru SK84)

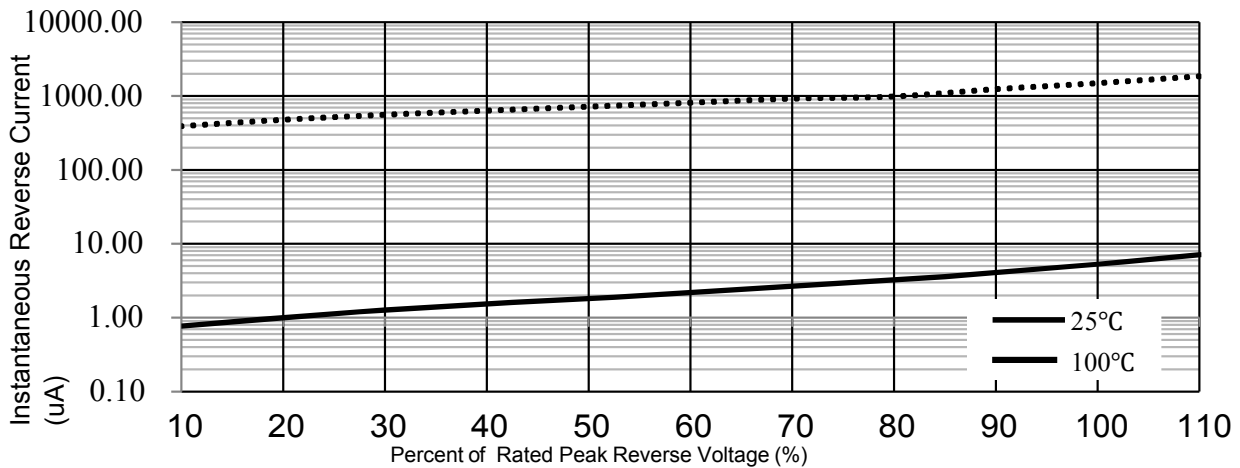


Fig 4. Typical Reverse Characteristics (SK85 thru SK86)

Typical Electrical and Characteristics Curves

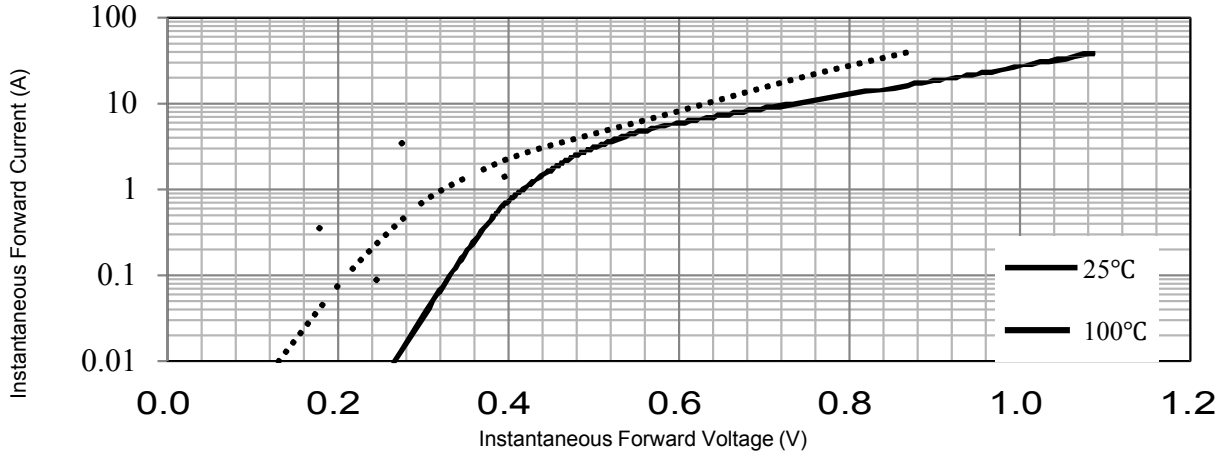


Fig 5. Typical Instantaneous Forward Characteristics (SK85 thru SK86)

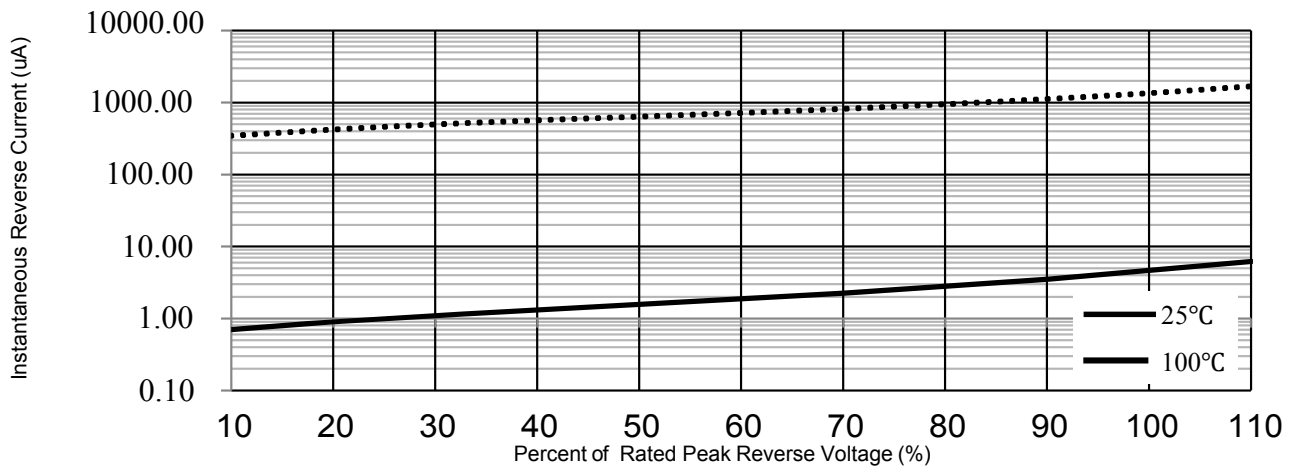
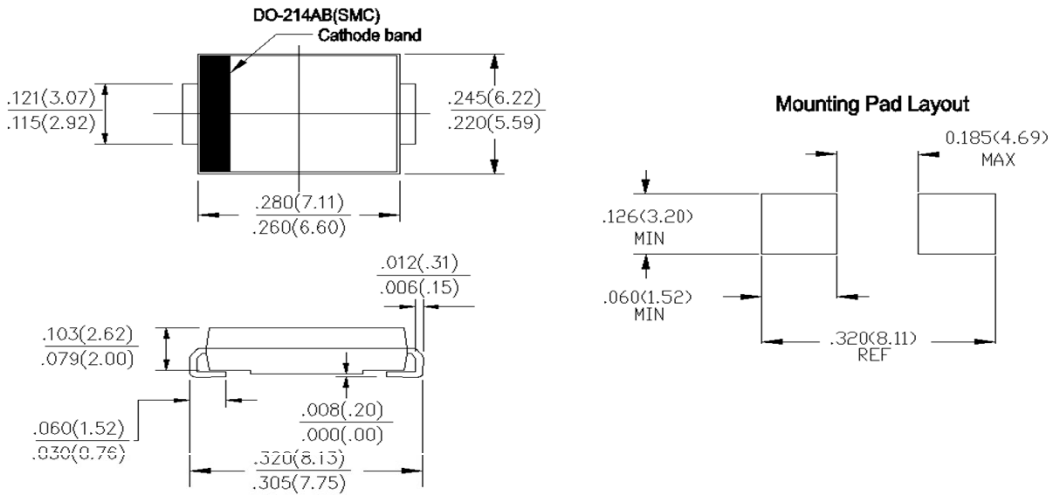


Fig 6. Typical Reverse Characteristics (SK85 thru SK86)

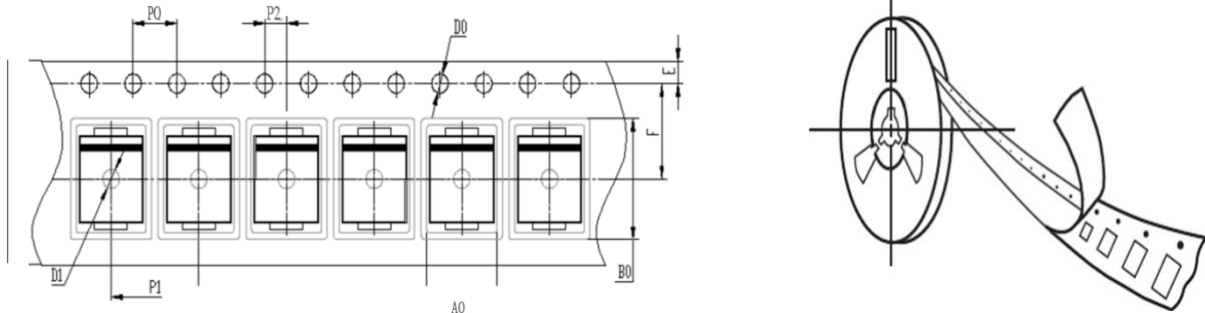
Package Outline Dimensions DO-214AB(SMC)



Packing Information

3000 pcs/Reel, 14 Reels/Box; 16mm Tape, 13" Reel

Tape & Reel Specification



Symbo	SMC (mm)
W	16±0.2
E	1.75±0.1
F	7.5±0.05
D0	1.5±0.1
DI	1.50 ±0.1/-0
PO	4.0±0.1
PI	8.0±0.1
P2	2.0±0.05
A0	6.22±0.1
B0	8.31±0.1