

K21W Schottky Barrier Rectifiers

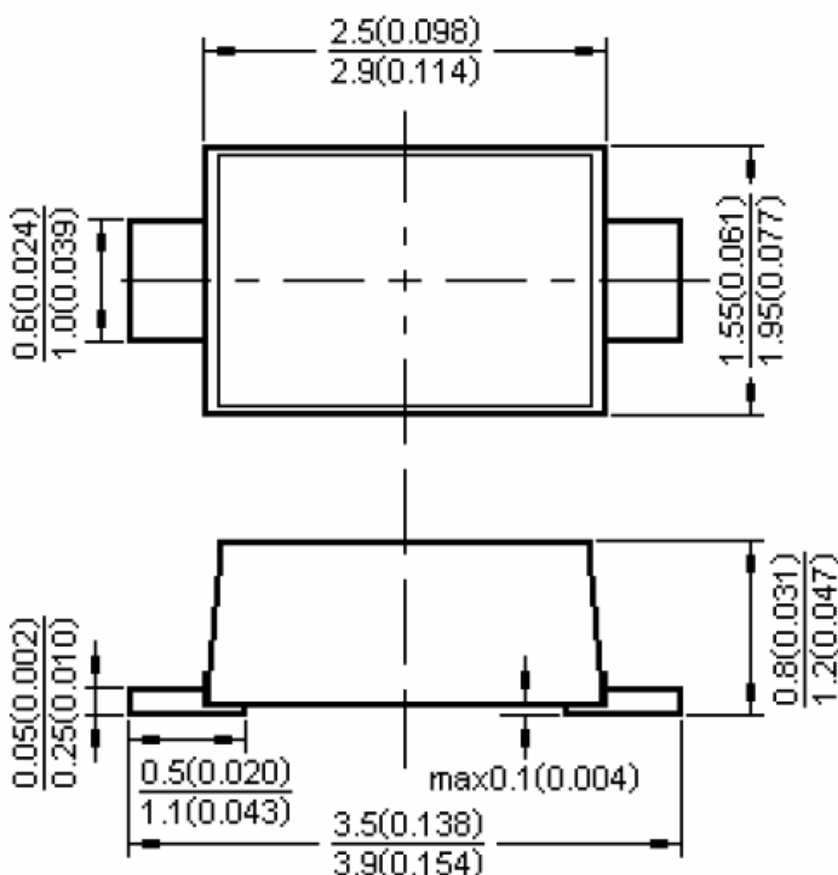
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for over voltage protection
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- These Devices are Pb-Free and are RoHS Compliant
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

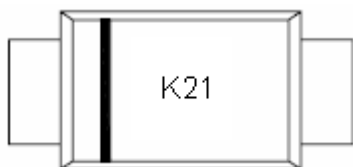
Mechanical Data

- Case: SOD123FL molded plastic over sky die
- Terminals: Tin Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.02g

Mechanical Dimensions (In mm)



SOD-123FL

Technical Data
Data Sheet N1782, Rev. -
Marking Diagram:


K21 = Part Name

Cautions : Molding resin
Epoxy resin UL: 94V-0

Ordering Information:

Device	Package	Shipping
K21W	SOD-123FL	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage	V_{RRM} V_{RWM} V_R	10	V
Maximum Average Rectified Forward Current at $T_A = 55^{\circ}\text{C}$	$I_{F(AV)}$	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50	A
Forward Voltage @ $I_F = 1\text{A}, T_A = 25^{\circ}\text{C}$ @ $I_F = 2\text{A}, T_A = 25^{\circ}\text{C}$	V_{FM}	0.38 0.42	V
Peak Reverse Current @ $V_R = 10\text{V}, T_A = 25^{\circ}\text{C}$	I_{RM}	3	mA
Maximum Junction Capacitance (Note 1)	C_j	500	pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	180	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$
Case Style	SOD-123FL		

Note1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.

2. PCB mounted on 0.2 X 0.2" (5.0 X 5.0 mm) copper pad areas.

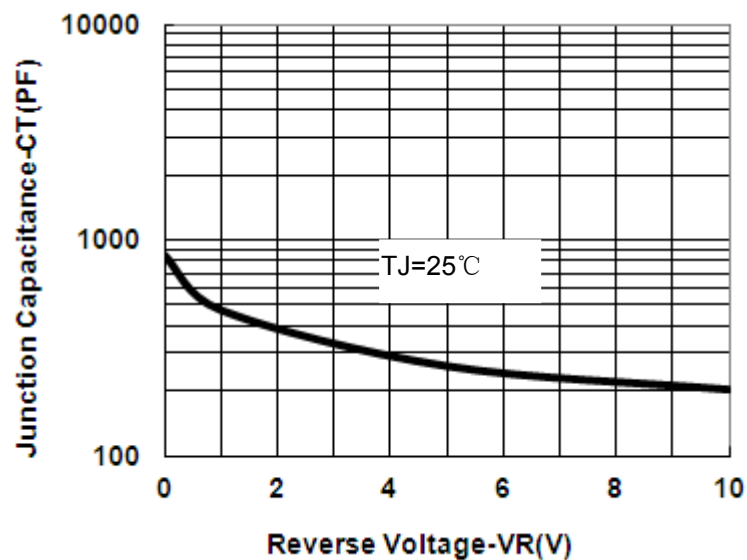


Fig.1-Typical Junction Capacitance

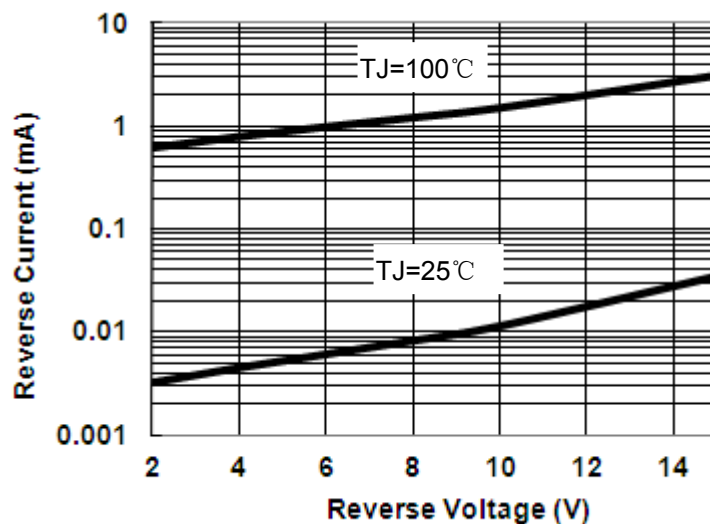


Fig.2-Typical Reverse Characteristics

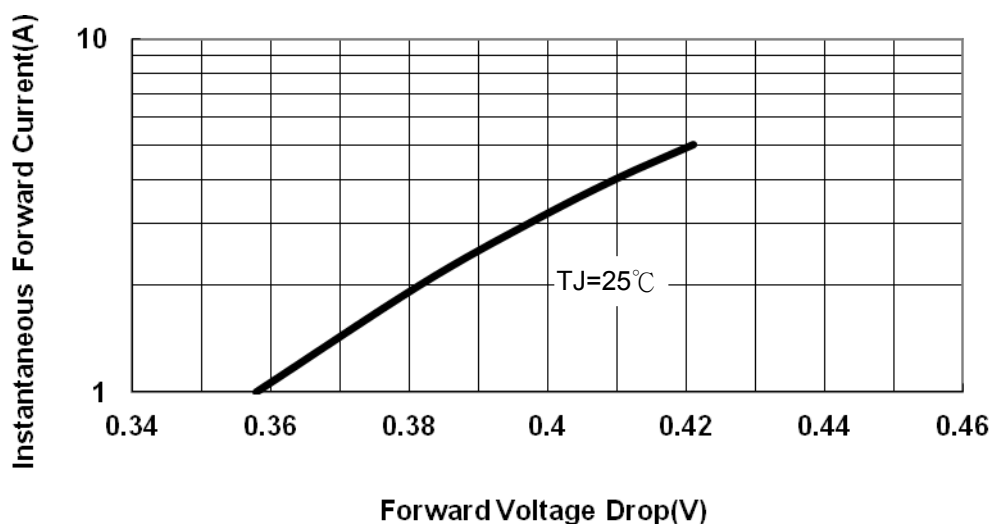


Fig.3-Typical Forward Voltage Drop Characteristics

Technical Data
Data Sheet N1782, Rev. -

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