DSK110W

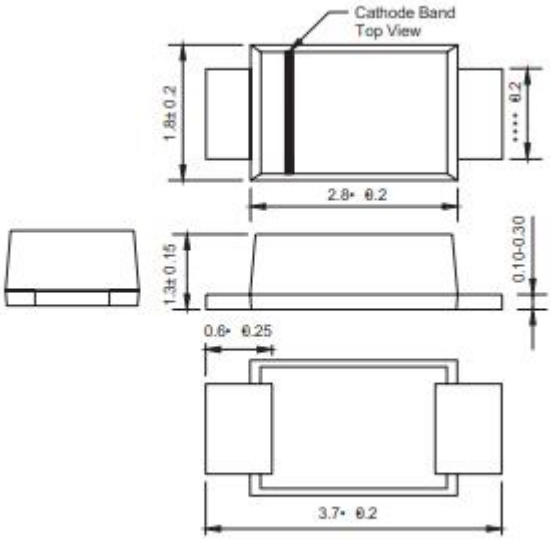
Schottky Barrier Rectifiers

Datasheet

Features

- Glass passivated die construction
- Low forward voltage drop
- Hgh current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

SOD-123FL



Dimensions in millimeters

Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	DSK110W	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	
Maximum DC blocking voltage	V_{DC}	100	
Average Rectified Output Current @T_A =90℃	I_o	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Forward Voltage per element @IF=3.0A(Note 1)	V_{FM}	0.85	V
Peak Reverse Current @T_A =25℃	I_R	0.5	mA
At Rated DC Blocking Voltage @T_A =125℃		40	
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	85	℃/W
Operating and storage temperature range	T_J ,T_{STG}	-55 to +150	℃

Note:1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient an
3. d from junction to lead mounted on P.C.B with 0.5×0.5"(13×13mm)copper pads.

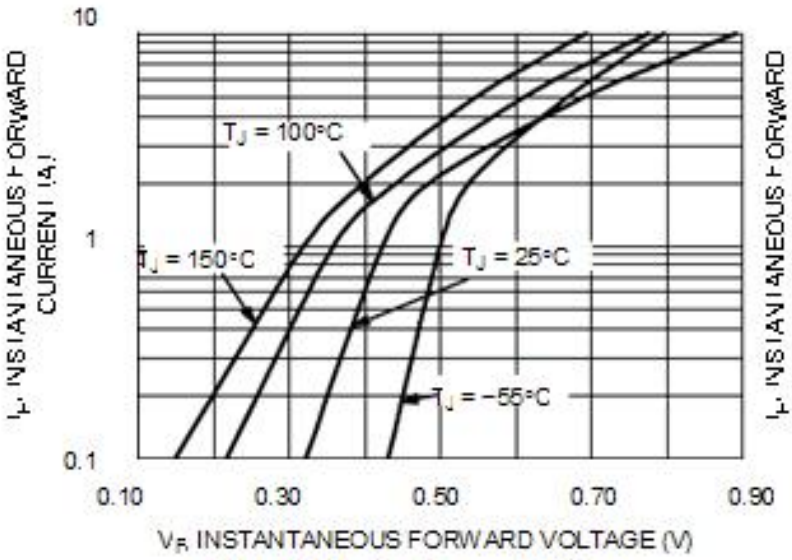


Figure 1. Typical Forward Voltage

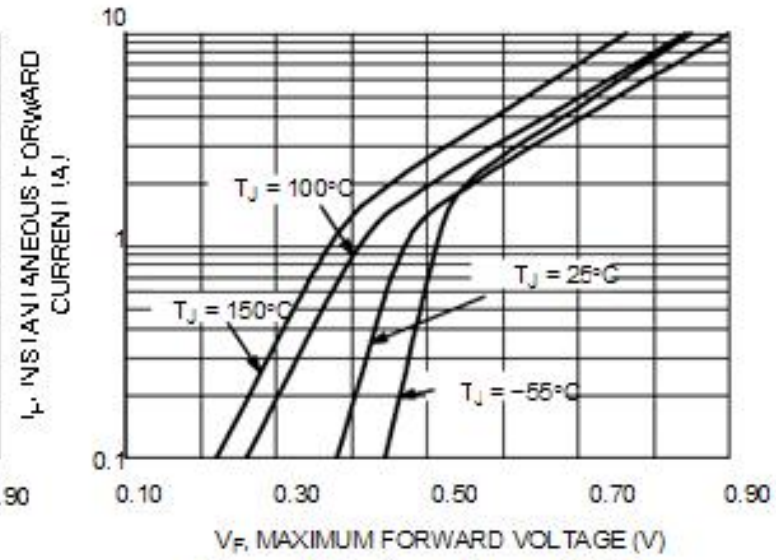


Figure 2. Maximum Forward Voltage

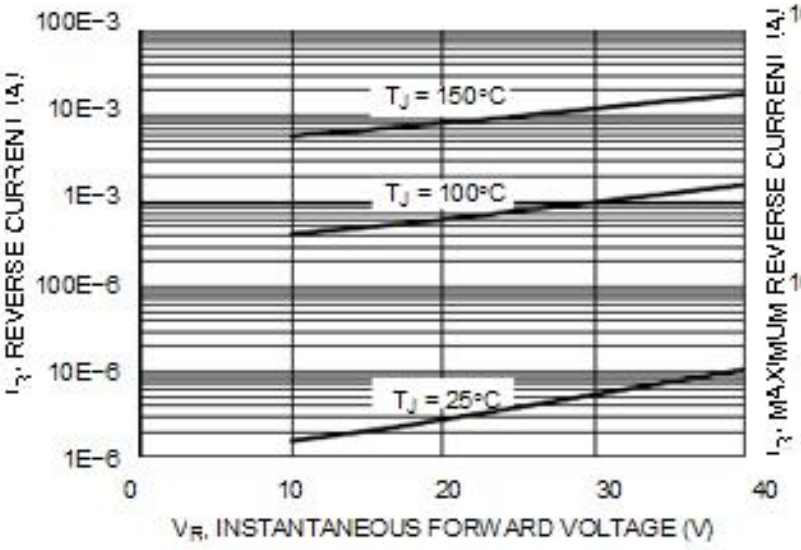


Figure 3. Typical Reverse Current

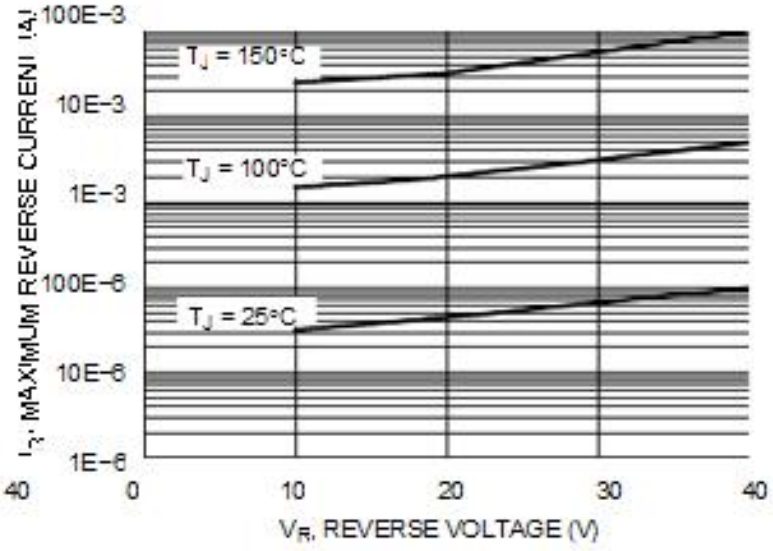


Figure 4. Maximum Reverse Current

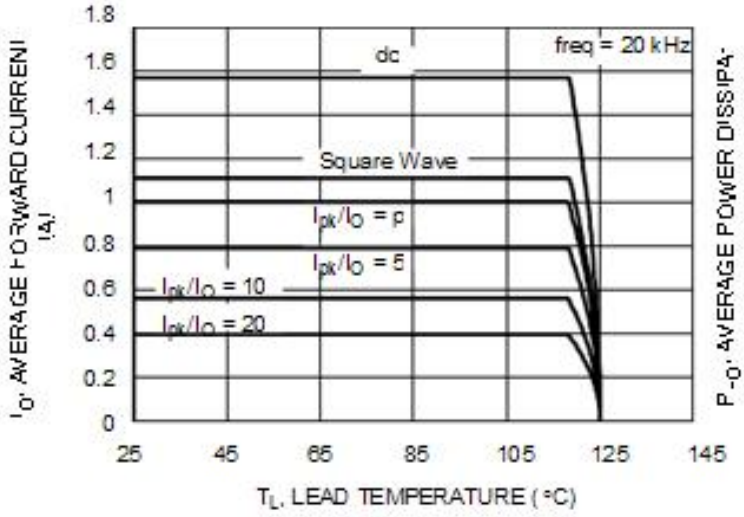


Figure 5. Current Derating

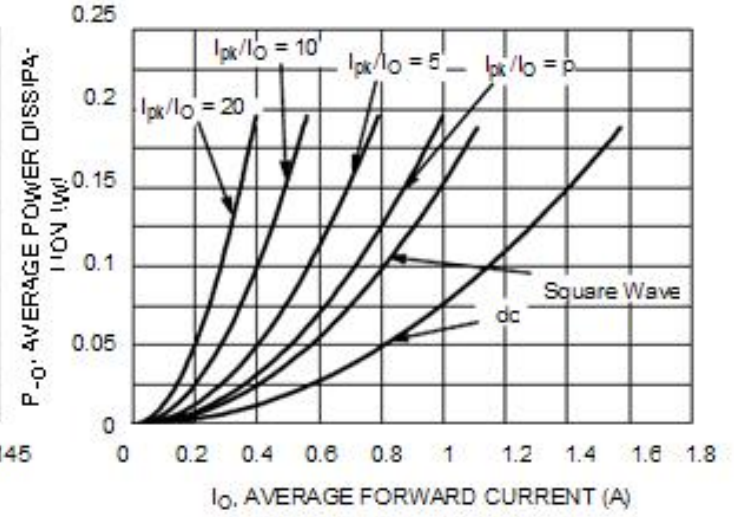


Figure 6. Forward Power Dissipation

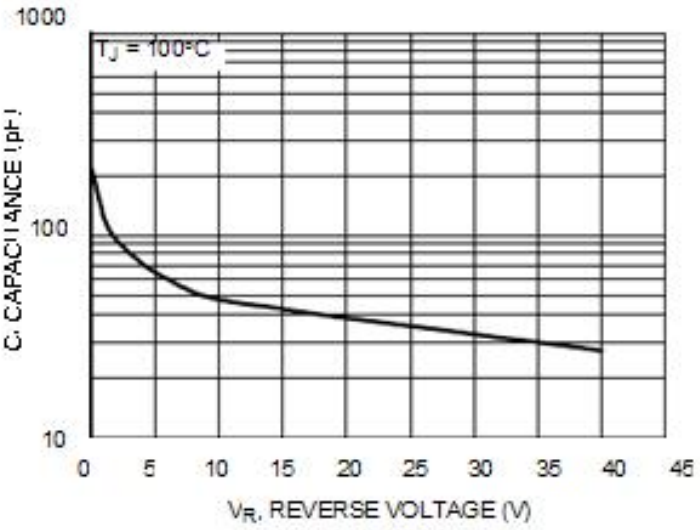


Figure 7. Capacitance

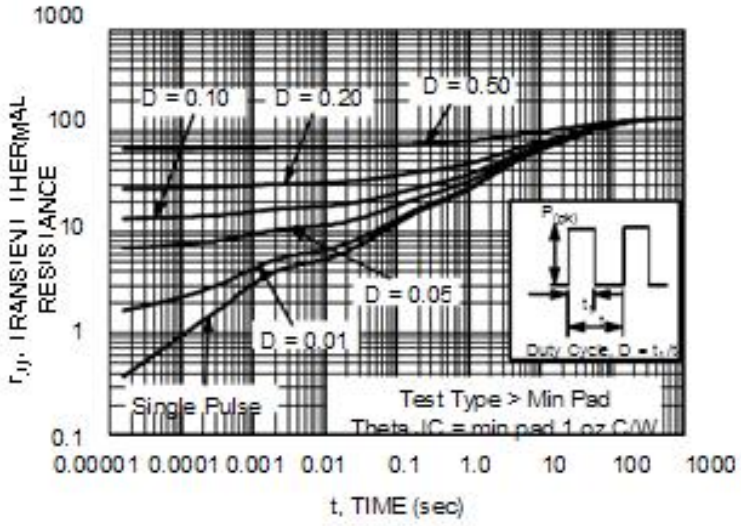


Figure 8. Thermal Response