



Features

- Average Forward Current: $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SOD-123FL



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
DS12W-DS110W	SOD-123FL	K1x	3000

x: From 2-10

Maximum Ratings (Ta=25°C unless otherwise noted)

Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Type Number	DS12W	DS13W	DS14W	DS15W	DS16W	DS18W	DS19W	DS110W	Units
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current See Fig. 1	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30								A
Maximum Instantaneous Forward Voltage at 1.0A	0.55			0.70		0.85			V
Maximum DC Reverse Current Ta=25°C	0.2								mA
at Rated DC Blocking Voltage Ta=100°C	10								mA
Typical Junction Capacitance (Note1)	110								pF
Typical Thermal Resistance RqJA (Note 2)	80								°C/W
Operating Temperature Range Tj	-65 — +125					-65 — +150			°C
Storage Temperature Range Tstg	-65 — +150								°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.



Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

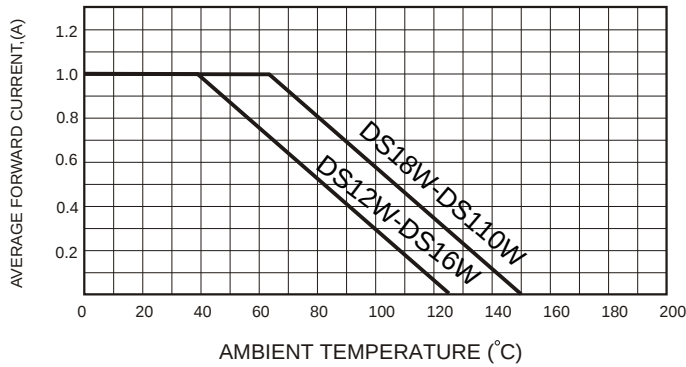


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

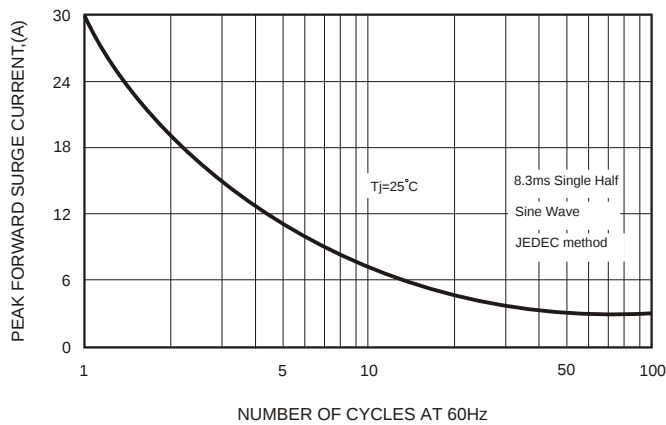


FIG.4-TYPICAL JUNCTION CAPACITANCE

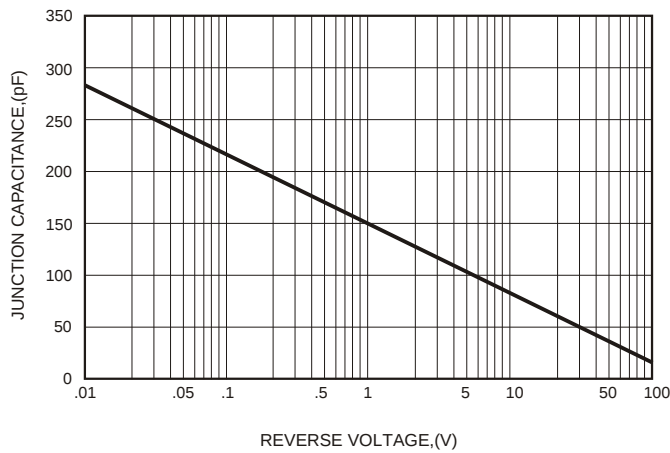


FIG.2-TYPICAL FORWARD

CHARACTERISTICS

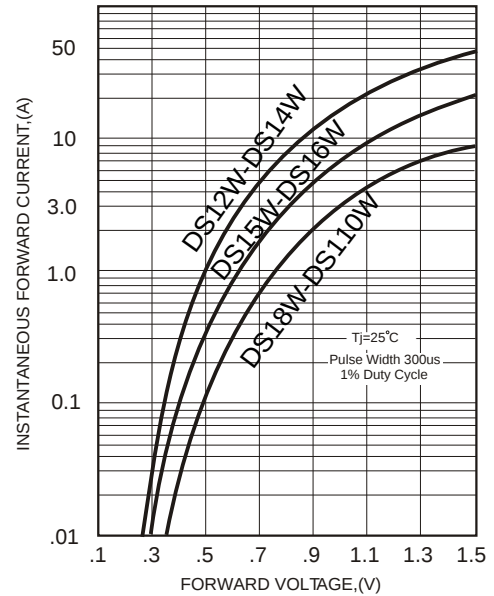
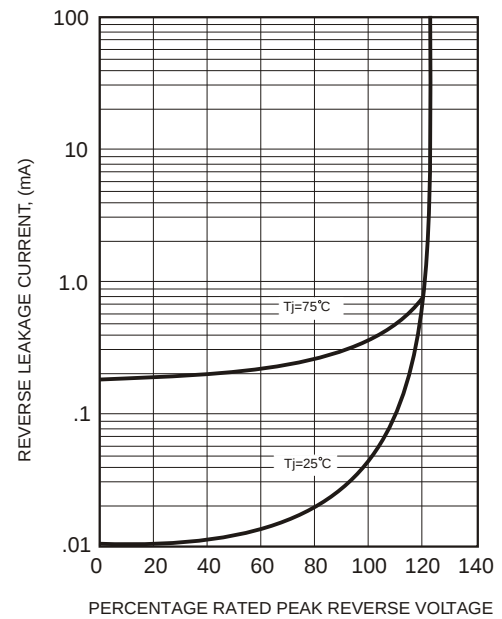


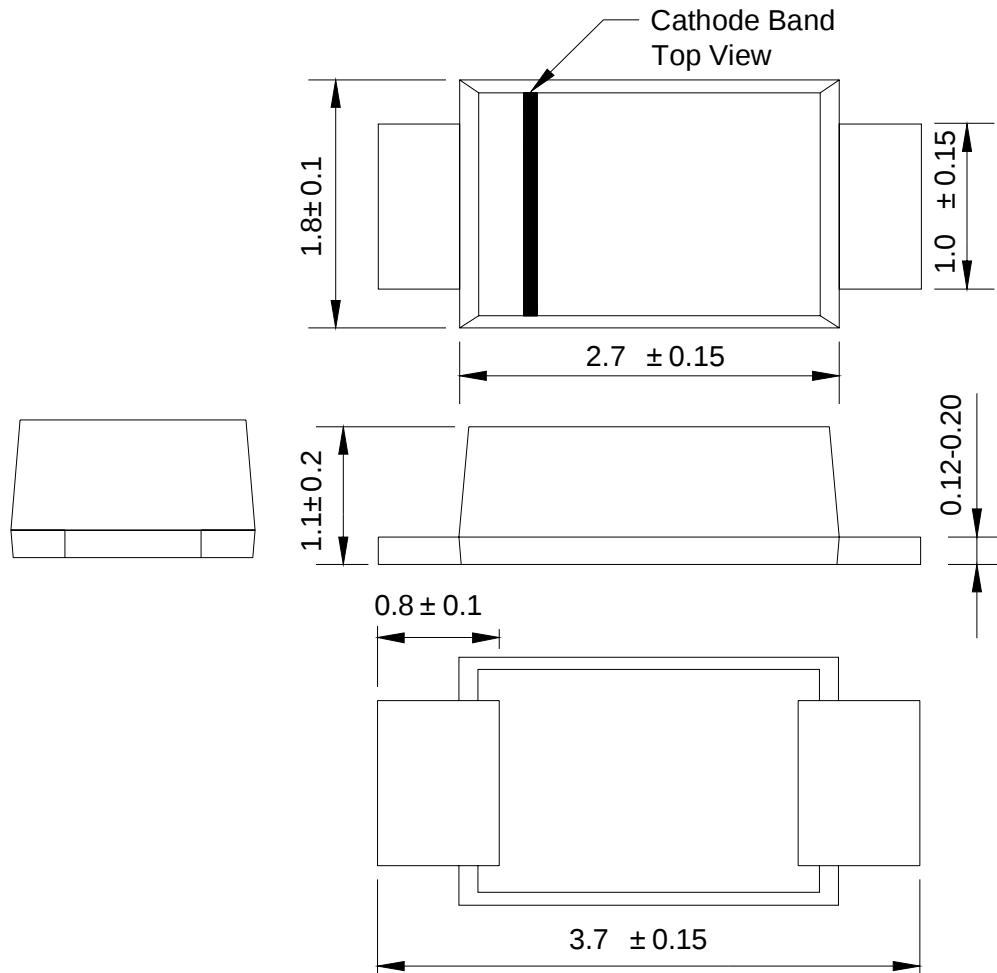
FIG.5 - TYPICAL REVERSE

CHARACTERISTICS





SOD-123FL Package Outline Dimensions





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