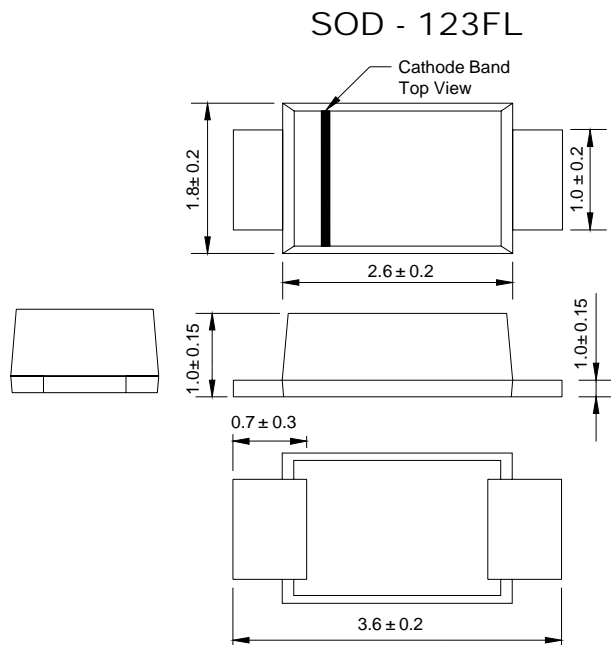


Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 20A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SOD-123FL, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.01 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	STPS 0520Z	STPS 0530Z	STPS 0540Z	STPS 0550Z	STPS 0560Z	STPS 0580Z	STPS 05100Z	STPS 05150Z	STPS 05200Z	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
Working Peak Reverse Voltage	V _{RWM}										
DC Blocking Voltage	V _R										
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	56	70	105	140	V
Average Rectified Output Current @T _L = 75°C	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}	20									A
Forward Voltage @I _F = 1.0A	V _{FM}	0.55			0.70		0.85		0.95		V
Peak Reverse Current @T _A = 25°C	I _{RM}	0.1									mA
At Rated DC Blocking Voltage @T _A = 100°C		20									
Typical Thermal Resistance (Note 1)	R _{θJL} R _{θJA}	28						88			°C/W
Typical Junction Capacitance	C _j	110					30		110		pF
Operating Temperature Range	T _j	-55 to +150									°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.

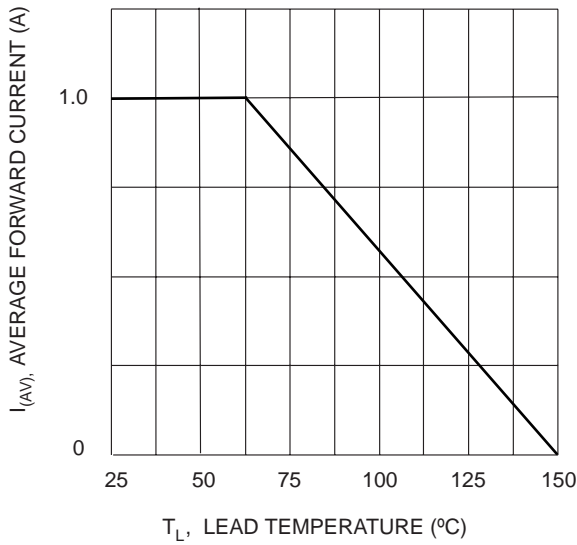


Fig. 1 Forward Current Derating Curve

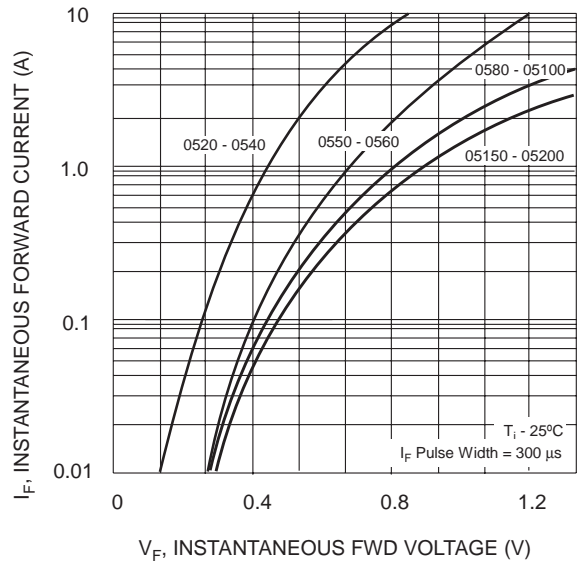


Fig. 2 Typ. Forward Characteristics

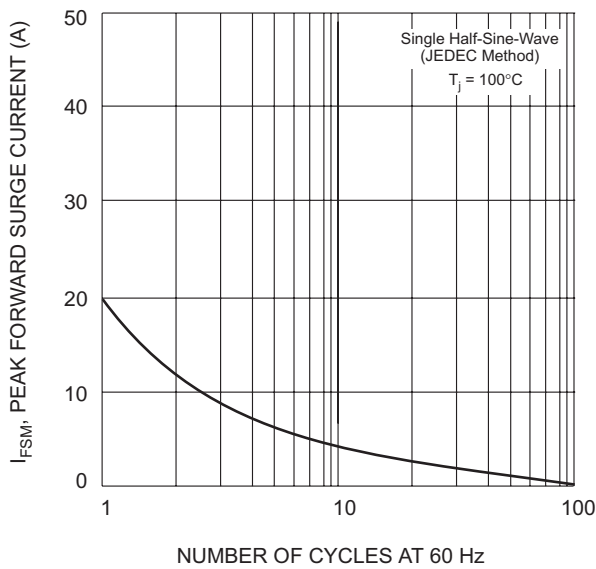


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

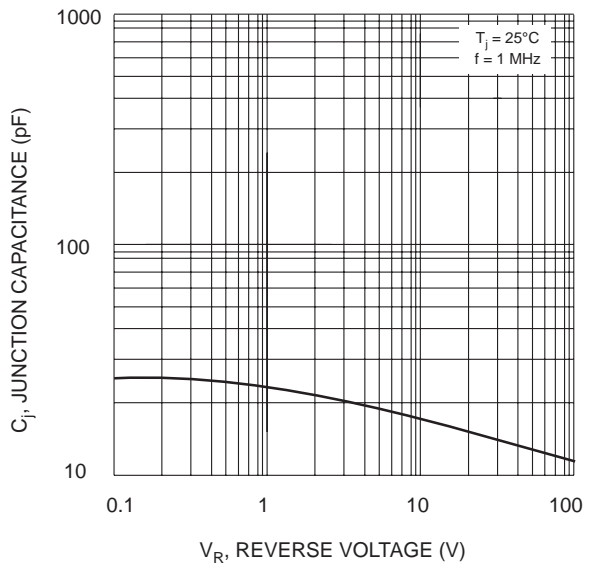


Fig. 4 Typical Junction Capacitance

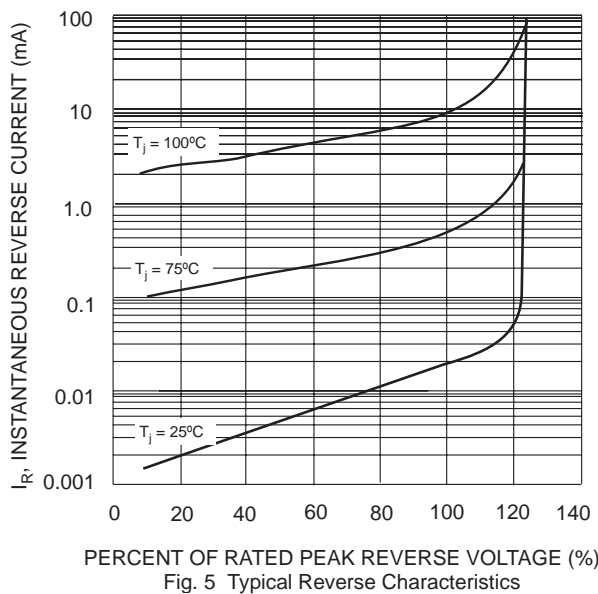


Fig. 5 Typical Reverse Characteristics