

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 2.0A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SOD-123, 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**

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

Characteristic	Symbol	DS32W	DS33W	DS34W	DS35W	DS36W	DS38W	DS310W	DS315W	DS320W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	40	50	60	80	100	150	200	V
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	3.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80									A
Forward Voltage @I _F = 3.0A	V _{FM}	0.55			0.70		0.85		0.95		V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	0.5 10					0.3 5				mA
Typical Thermal Resistance (Note 1)	R _{θJL} R _{θJA}	28 40									°C/W
Typical Junction Capacitance	C _j	250			160						pF
Operating Temperature Range	T _j	-65 to +125									°C
Storage Temperature Range	T _{STG}	-65 to +150									°C

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

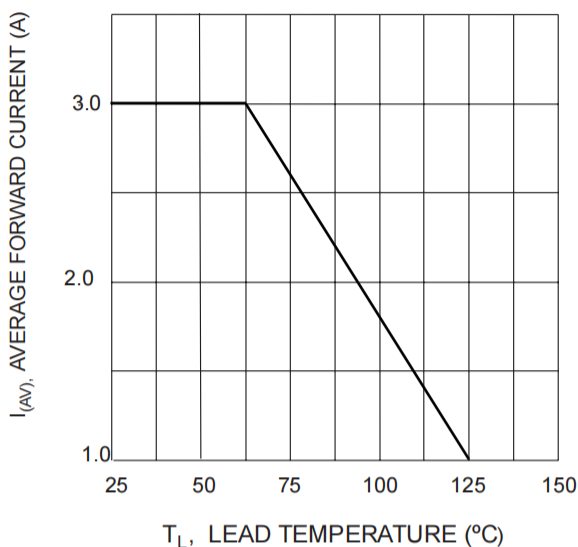


Fig. 1 Forward Current Derating Curve

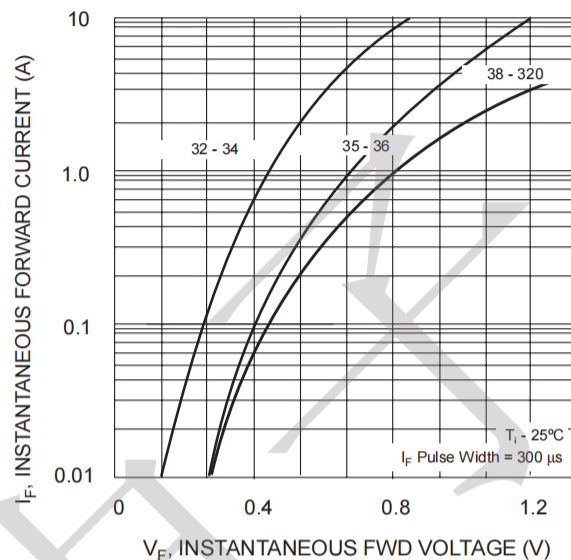


Fig. 2 Typ. Forward Characteristics

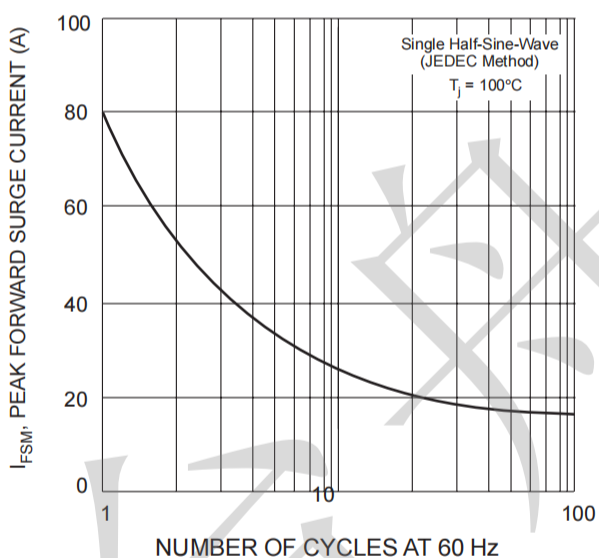


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

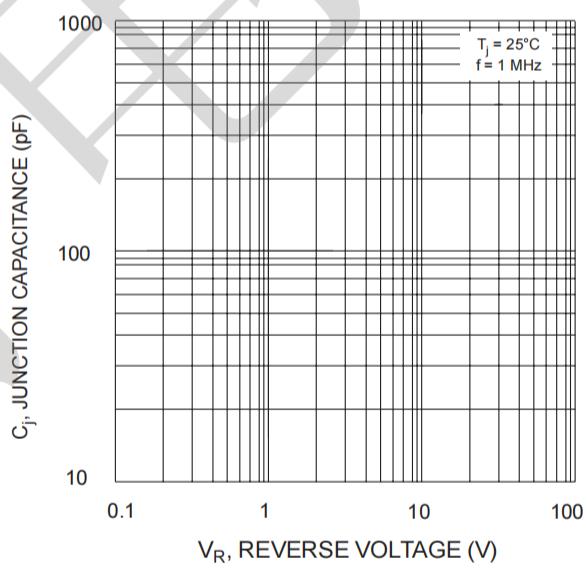


Fig. 4 Typical Junction Capacitance

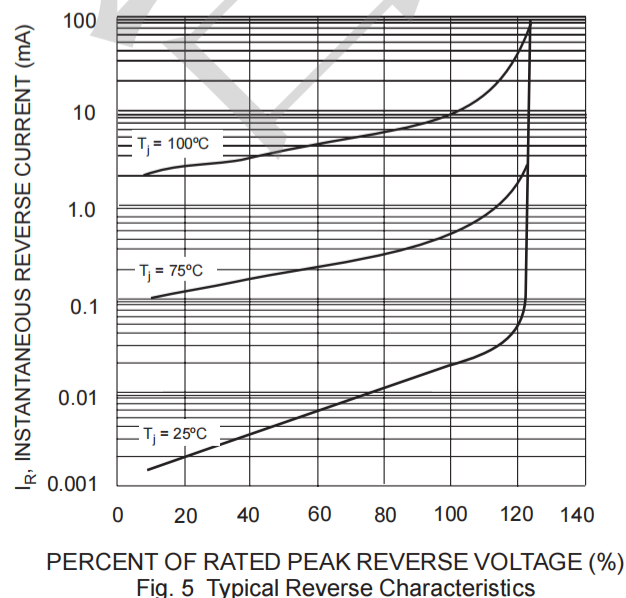
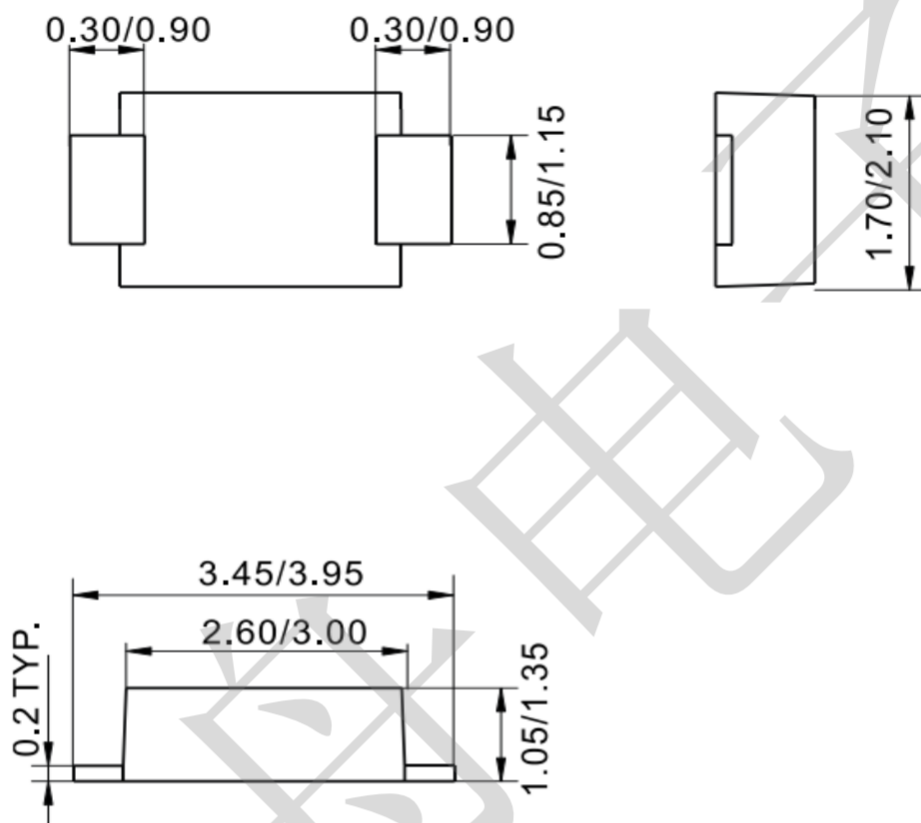


Fig. 5 Typical Reverse Characteristics

Package Outline Dimensions (unit:mm)

SOD-123FL



Mounting Pad Layout (unit: mm)

