

VOLTAGE RANGE: 50 - 1000V

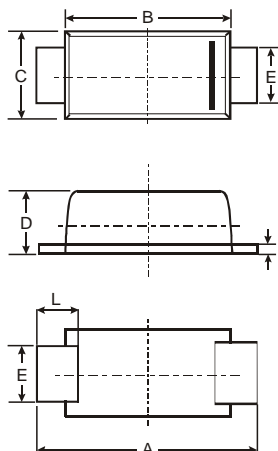
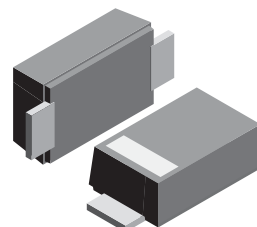
CURRENT: 0.5A

Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junctions
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering
260°C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body over passivated chip
- Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight:0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

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

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

Characteristic	Symbol	DSR 05A	DSR 05B	DSR 05D	DSR 05G	DSR 05J	DSR 05K	DSR 05M	Unit
	Marking	05A	05B	05D	05G	05J	05K	05M	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T _A =65°C (NOTE 1)	I _(AV)	0.5							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T _L =25°C	I _{FSM}	15.0							A
Maximum instantaneous forward voltage at 0.5A	V _F	1.1							V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 50.0							μA
Typical junction capacitance (NOTE 2)	C _J	4							pF
Typical thermal resistance (NOTE 3)	R _{θJA}	220							K/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C

Note1: Mounted on FR-4 P.C.B. With 0.9x1.5 mm copper pad areas (≈35 μm thick)



RATINGS AND CHARACTERISTIC CURVES DSR05A THRU DSR05M

Fig.1 Forward Current Derating Curve

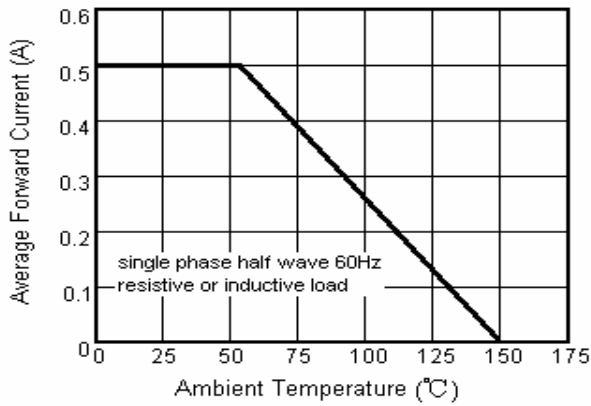


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

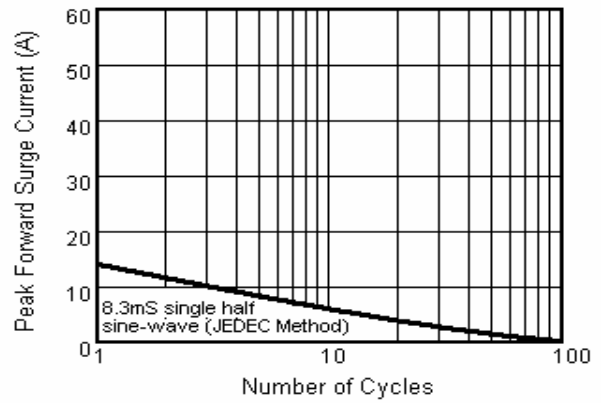


Fig.3 Typical Instantaneous Forward Characteristics

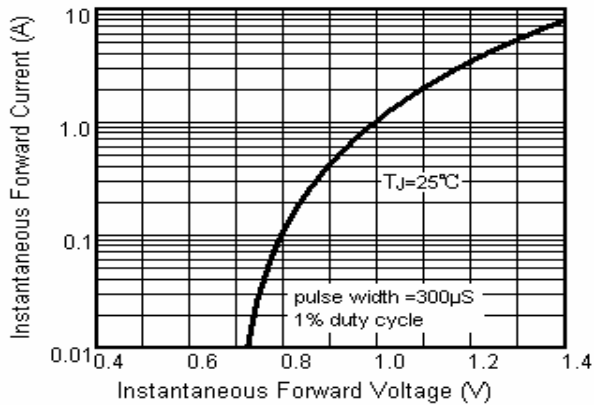


Fig.4 Typical Reverse Characteristics

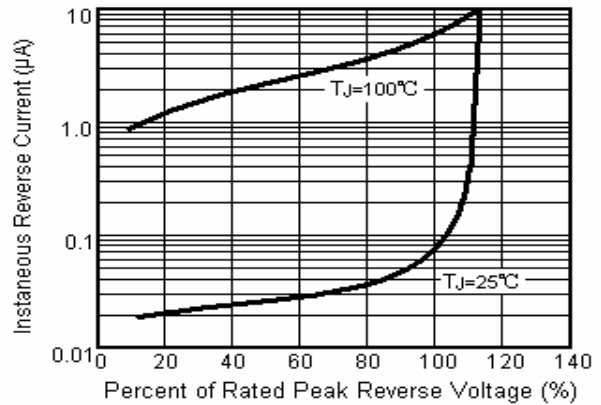


Fig.5 Typical Junction Capacitance

