

SURFACE MOUNT SUPER FAST RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 1.0 Ampere

Features

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
260°C/10 seconds,0.375"(9.5mm) lead length,
5lbs.(2.3kg)tension

Mechanical Data

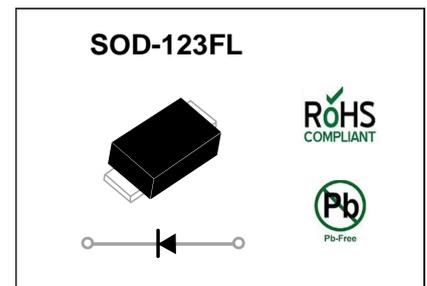
- Case:SOD-123FL molded plastic body over passivated chip
- Terminals: Plated axial leads,solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams

Specification

Maximum Rating And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

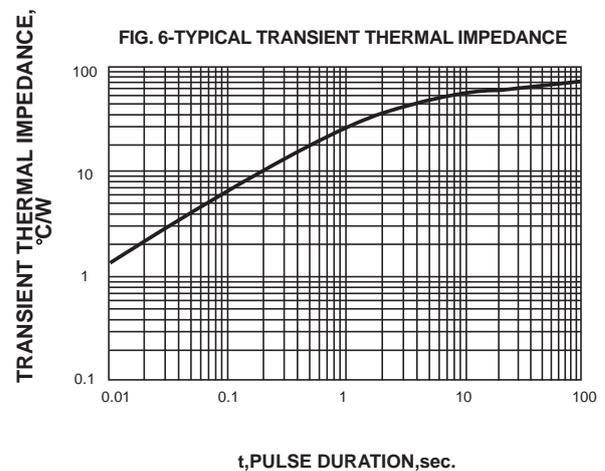
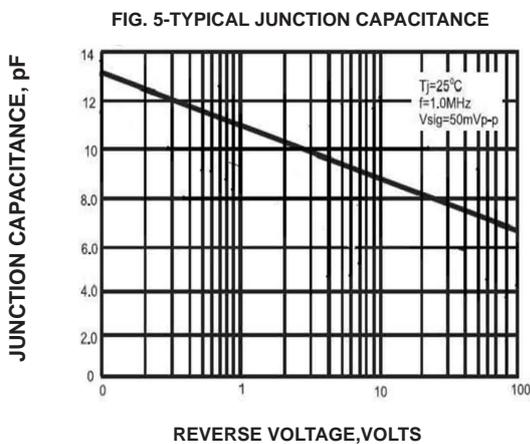
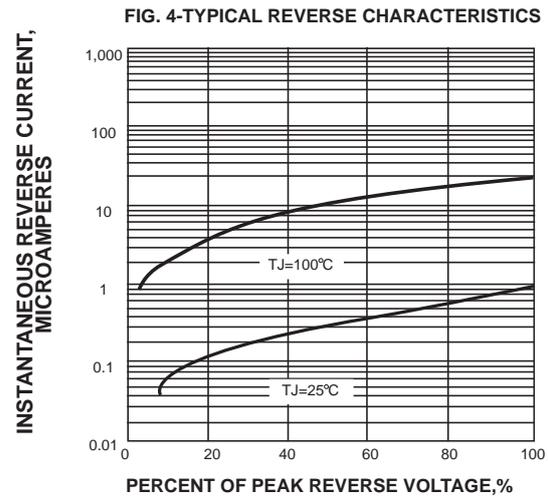
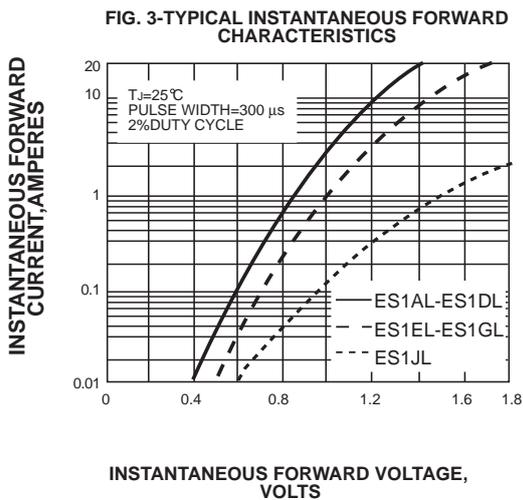
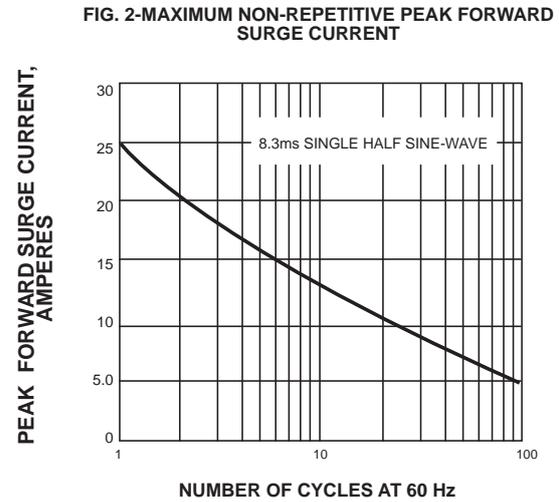
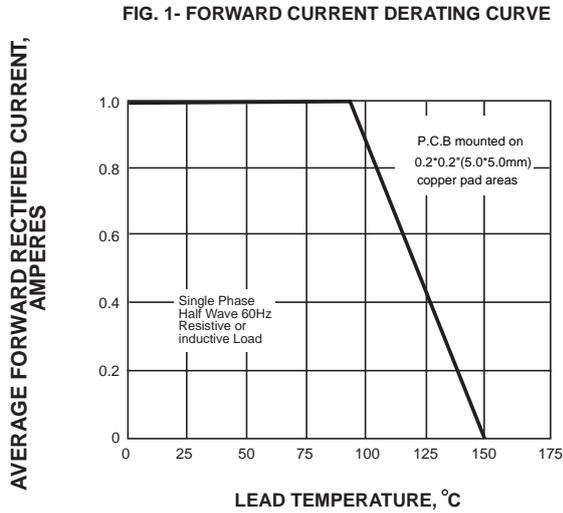
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.



	SYMBOLS	ES1AL EA	ES1BL EB	ES1CL EC	ES1DL ED	ES1EL EE	ES1GL EG	ES1JL EJ	UNITS	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	V	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	V	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	V	
Maximum average forward rectified current	I _(AV)	1.0							A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	25.0							A	
Maximum instantaneous forward voltage at1.0A	V _F	0.95			1.25		1.7		V	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0				100.0				μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	35							ns	
Typical junction capacitance (NOTE 2)	C _J	10							pF	
Typical thermal resistance (NOTE 3)	R _{θJA}	95							°C/W	
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +150							°C	

Note: 1.Measured with IF=0.5A, IR=1A, Irr=0.25A.
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.PCB mounted on 0.2*0.2" (5.0*5.0mm) coppeer pad area.

Ratings and characteristic curves ES1AL thru ES1JL



Marking and packing illustration

1、Marking



SYMBOL	Explanation
A	Product Name

2、Packaging



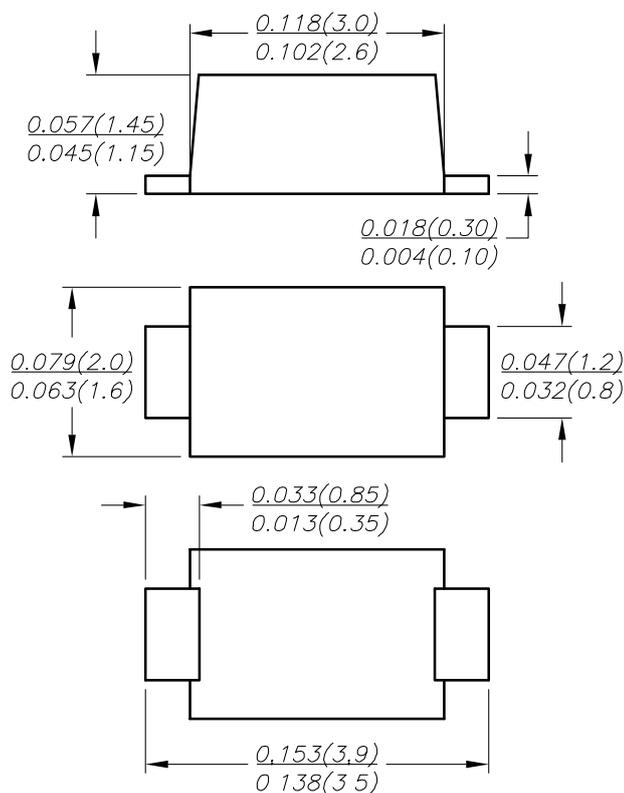
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	SOD-123FL	ITEM	SYM BOL	SOD-123FL
Carrier width	A	2.1(0.083)Max	Carrier depth	K	1.60(0.063)Typ
Carrier length	B	4.0(0.157)Max	Punch hole pitch	P	4.00(0.157)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	177.8(7)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.25(0.098)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	8.15(0.321)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	10.5(0.413)Min
Punch hole position	H	3.50(0.138)Typ			

3、Ordering Information

Part Number	Compliance	Case	Packaging
SSXX	Standard	SOD-123FL	3000/Tape & Reel

Dimension

SOD-123FL



Dimensions in inches and (millimeters)

DISCLAIMER

JHG PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with JHG products. You are solely responsible for

- (1) selecting the appropriate JHG products for your application;
- (2) designing, validating and testing your application;
- (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements.

These resources are subject to change without notice. JHG grants you permission to use these resources only for development of an application that uses the JHG products described in the resource. Other reproduction and display of these resources are prohibited. No license is granted to any other JHG intellectual property right or to any third party intellectual property right. JHG disclaims responsibility for, and you will fully indemnify JHG and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.