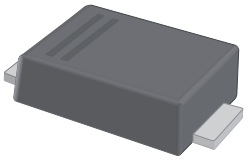
General Purpose Silion Rectifiers

1N4001FL ~ 1N4007FL

SOD-123FL



Top View

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Features

- Surface Mount General Purpose Silicon Rectifiers
- Reverse Voltage - 50 to 1000 V
- Forward Current: 1 A

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	1N4001FL	1N4002FL	1N4003FL	1N4004FL	1N4005FL	1N4006FL	1N4007FL	Unit
Repetitive Peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Surge Peak reverse voltage	V_{RSM}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Forward voltage @I_F=1A	V_F	1.1							
Max.averaged fwd.current. @Ta=65℃	I_{FAV}	1							A
Peak forward surge current	I_{FSM}	25							
Maximum DC Reverse Current Ta=25℃	I_R	5							μA
Ta=125℃		100							
Typical Junction Capacitance *1	Cj	4							pF
Thermal Resistance Junction to Ambient *2	$R_{\theta JA}$	180							℃/W
Junction temperature	Tj	150							℃
Storage temperature	Tstg	-55 to 150							

* 1 Measured at 1 MHz and applied reverse voltage of 4 V D.C

* 2 Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

■ Marking

NO.	1N4001FL	1N4002FL	1N4003FL	1N4004FL	1N4005FL	1N4006FL	1N4007FL
Marking	A1	A2	A3	A4	A5	A6	A7

General Purpose Silion Rectifiers

1N4001FL ~ 1N4007FL

■ Typical Characterisitics

Fig.1 Forward Current Derating Curve

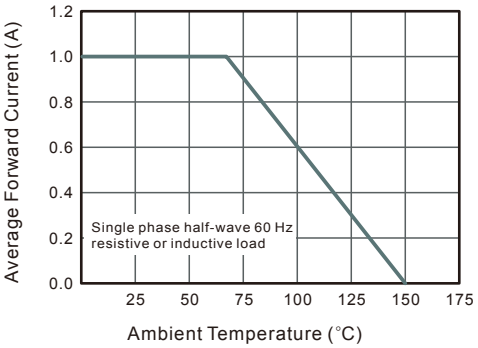


Fig.2 Typical Instaneous Reverse Characteristics

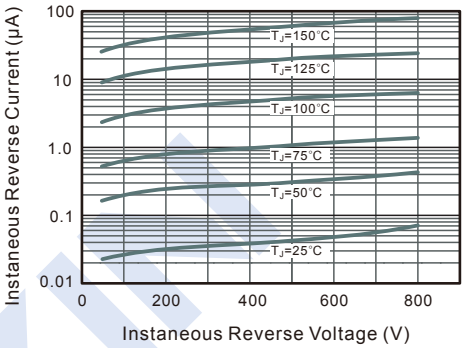


Fig.3 Typical Forward Characteristic

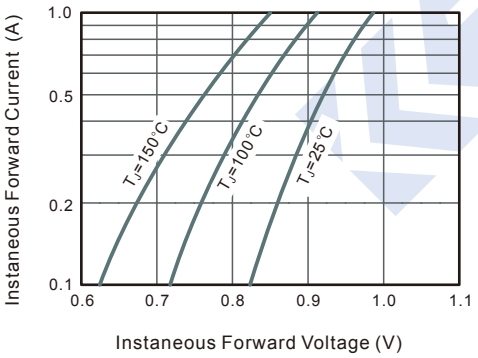
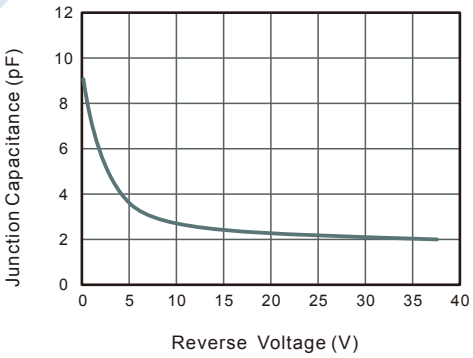
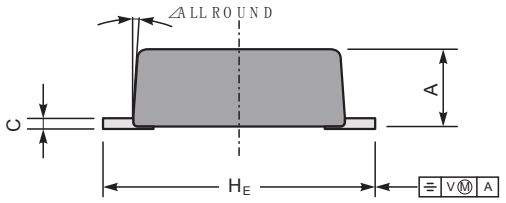


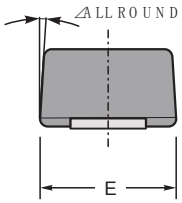
Fig.4 Typical Junction Capacitance

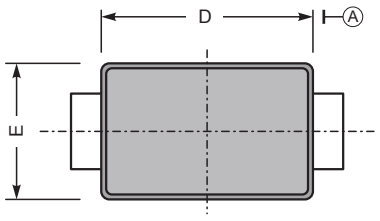


PACKAGE OUTLINE

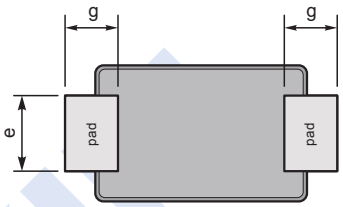
Plastic surface mounted package; 2 leads SOD-123FL







Top View



Bottom View

UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size