



DESCRIPTION

The ES2AW~ES2JW are available in SOD-123FL package

ORDERING INFORMATION

Package Type	Part Number
SOD-123FL	ES2AW
	ES2BW
	ES2CW
	ES2DW
	ES2EW
	ES2GW
	ES2JW
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURES

- Easy pick and place
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Superfast recovery times for high efficiency
- Available in SOD-123FL package

MECHANICAL DATA

Case: SOD-123FL

Terminals: Solderable per MIL-STD-750,
Method 2026

Approx. Weight: 15mg / 0.00053oz

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter		Symbol	ES2AW	ES2BW	ES2CW	ES2DW	ES2EW	ES2GW	ES2JW	Unit
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 at T _L =100°C		I _{F(AV)}	2							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	50							A
Maximum Forward Voltage at 2A		V _F	1				1.25		1.68	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C T _A =125°C	I _R	5 100							uA
Typical Junction Capacitance at V _R =4V, f=1MHz		C _J	25							pF
Maximum Reverse Recovery Time ^{NOTE1}		t _{rr}	35							ns
Typical Thermal Resistance ^{NOTE2}		R _{θJA}	90							°C/W
Operating and Storage Temperature Range		T _J , T _{STG}	-55 ~150							°C

NOTE1: Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$

NOTE2: P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



TYPICAL CHARACTERISTICS

Figure. 1 Reverse Recovery Time Characteristic and Test Circuit Diagram

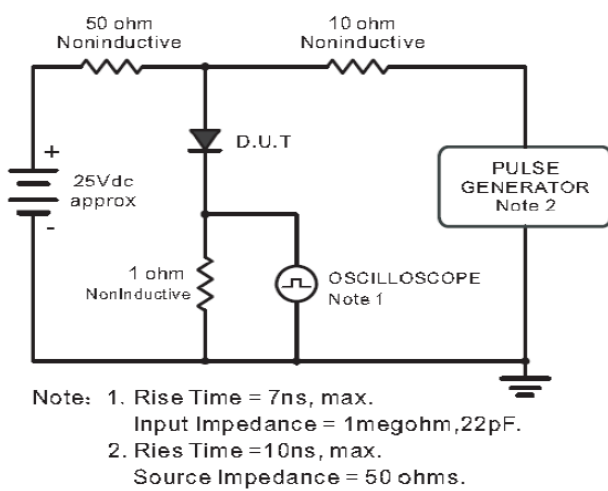
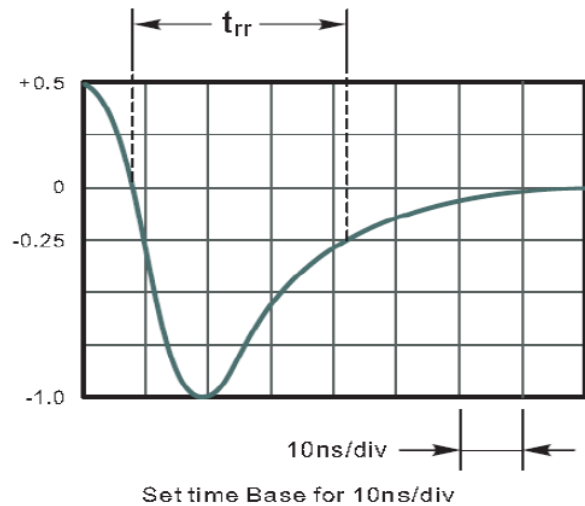


Figure. 2 Maximum Average Forward Current Rating

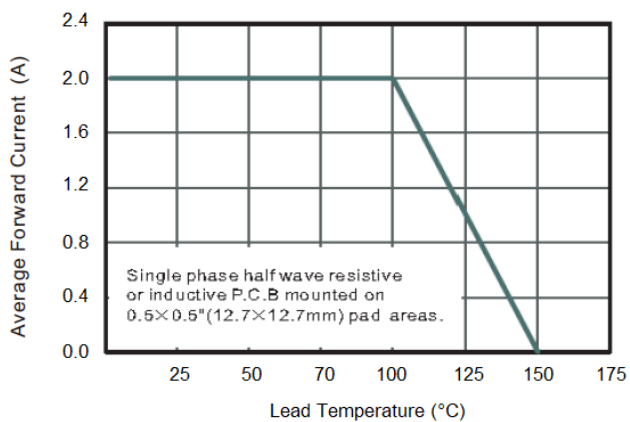


Figure. 3 Typical Reverse Characteristics

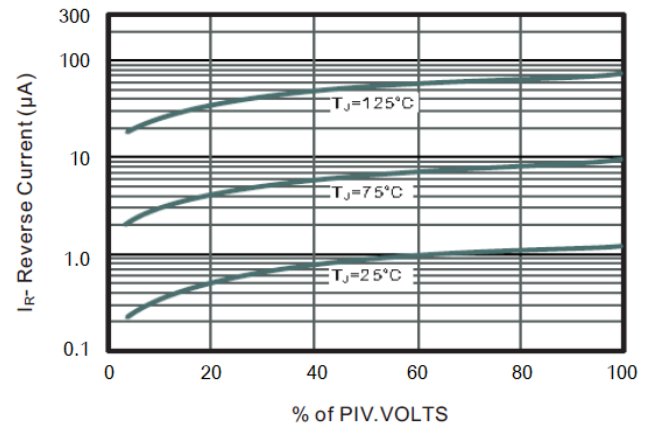




Figure. 4 Typical Forward Characteristics

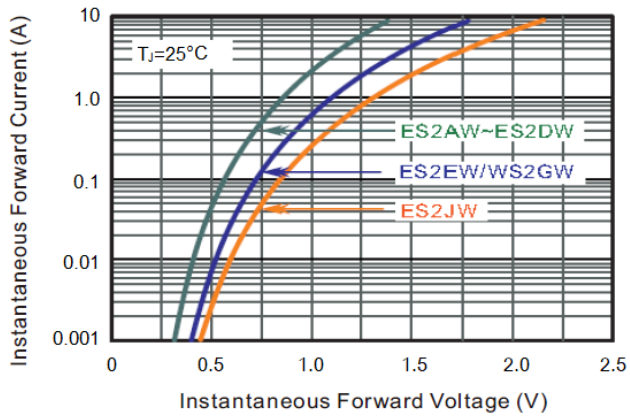


Figure. 5 Typical Junction Capacitance

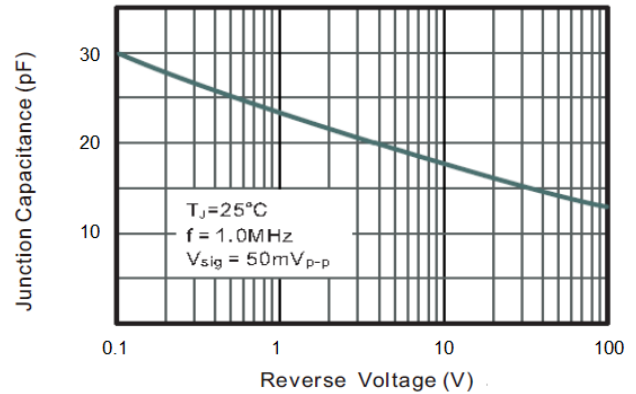
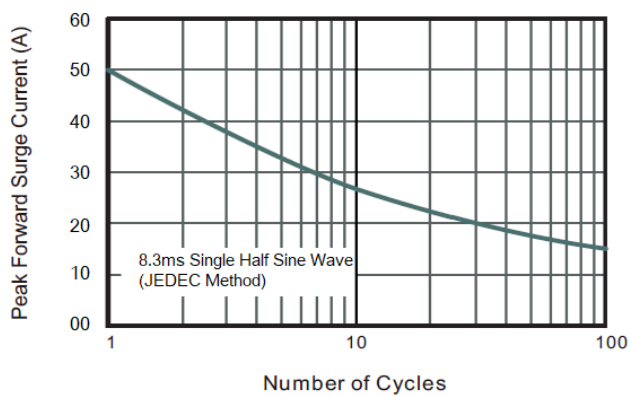


Figure. 6 Maximum Non-Repetitive Peak Forward Surge Current

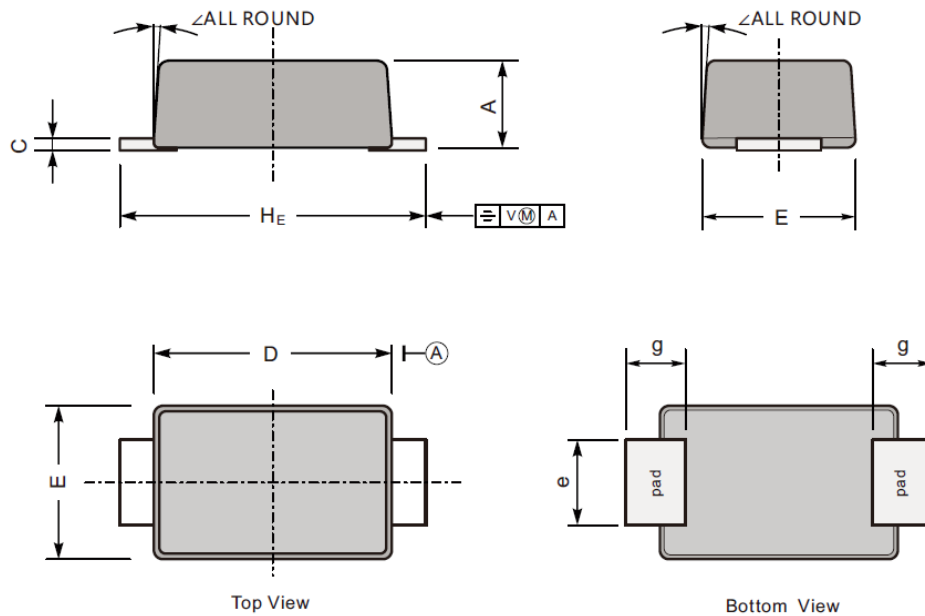




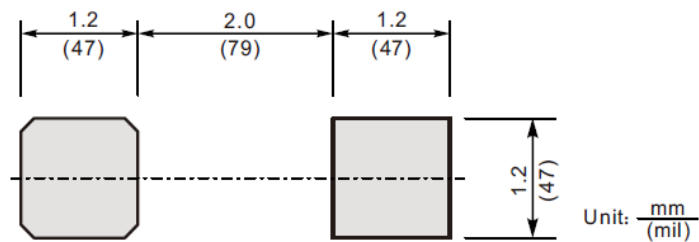
PACKAGE INFORMATION

Dimension in SOD-123FL(Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



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	



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