



## DESCRIPTION

The ABS1~ABS10 are available in ABS Package.

## ORDERING INFORMATION

Package Type	Part Number
ABS	ABS1
	ABS2
	ABS4
	ABS6
	ABS8
	ABS10
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

## FEATURES

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 0.8 A
- High Surge Current Capability
- Designed for Surface Mount Application
- Available in ABS Package

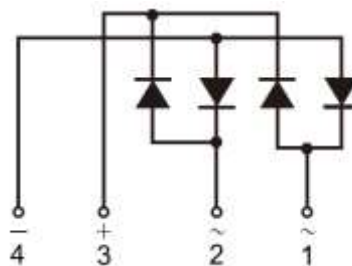
## MECHANICAL DATA

Case: ABS

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

Approx. Weight: 88mg 0.0029oz

## PIN DESCRIPTION



1. Input Pin (~)
2. Input Pin (~)
3. Output Anode (+)
4. Output Cathode (-)



## 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 current derate by 20 %.

Parameter	Symbol	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_A=40^\circ\text{C}$	$I_o$	0.8						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30						A
Forward Voltage Per Element	$I_F=0.4\text{A}$ $I_F=0.8\text{A}$	$V_F$	1.0 1.1				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5.0 100 500				$\mu\text{A}$	
Typical Junction Capacitance <sup>NOTE1</sup>	$C_j$	13				pF		
Typical Thermal Resistance <sup>NOTE2</sup>	$R_{\theta JA}$	80				$^\circ\text{C}$		
	$R_{\theta JL}$	16				/W		
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 ~ 150				$^\circ\text{C}$		

NOTE1: Measured at 1MHz and applied reverse voltage of 4 V D.C.

NOTE2: Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> copper pad.



## TYPICAL CHARACTERISTICS

Figure 1. Average Rectified Output Current Derating Curve

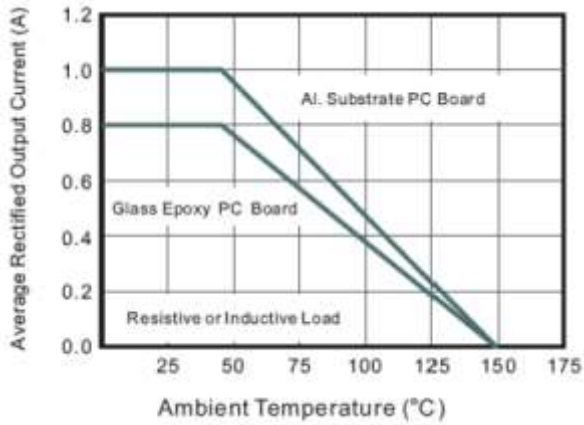


Figure 2. Typical Reverse Characteristics

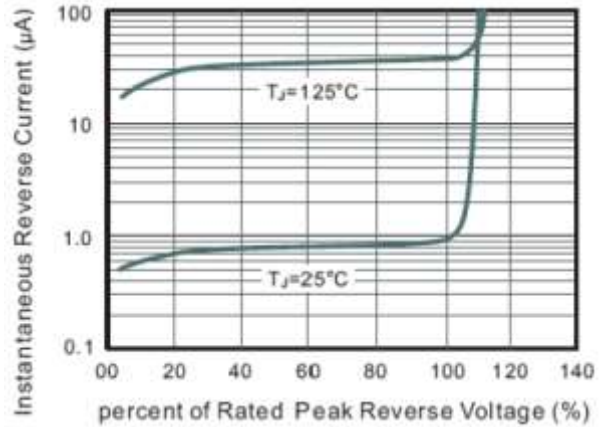


Figure 3. Typical Instantaneous Forward Characteristics

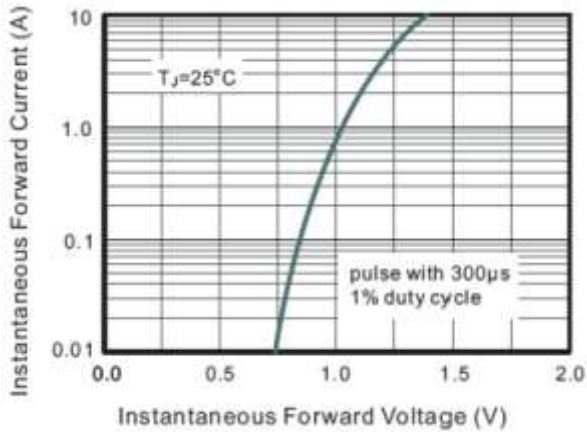


Figure 4. Typical Junction Capacitance

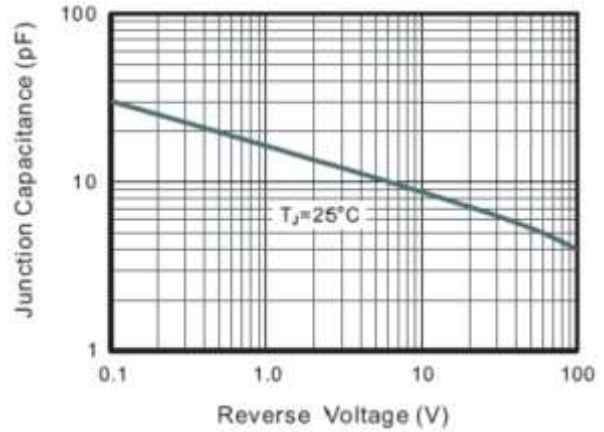
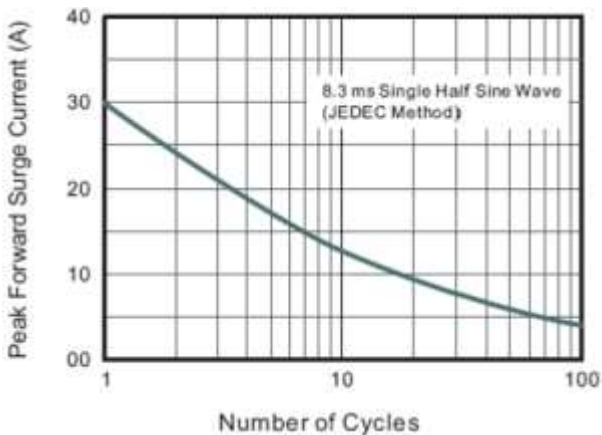


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

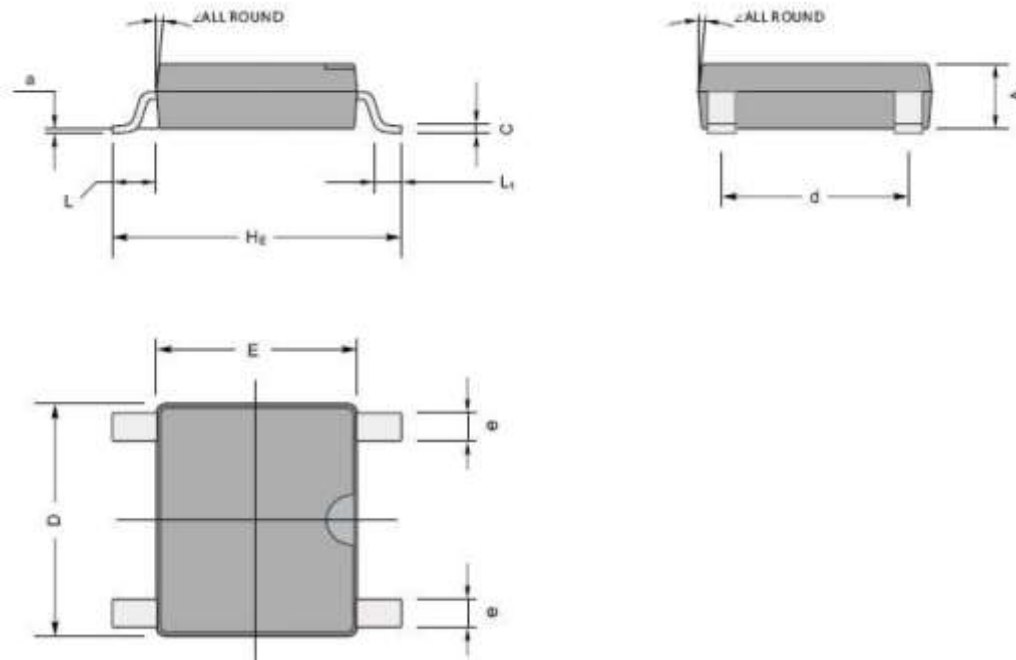




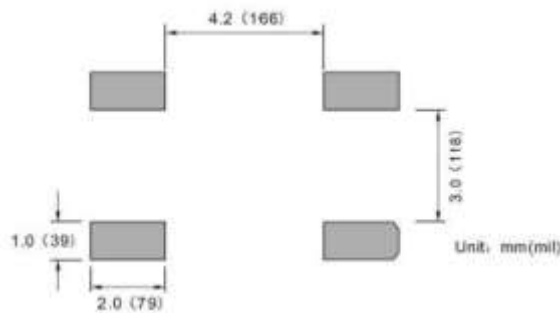
**PACKAGE INFORMATION**

Dimension in ABS Package (Unit: mm/mil)

Plastic surface mounted package; 4 leads



The recommended mounting pad size



UNIT		A	C	D	E	HE	d	e	L	L1	a	∠
mm	Min	1.3	0.15	4.9	4.2	6.0	3.8	0.5	0.95	0.6	0.2	7°
	Max	1.5	0.22	5.2	4.5	6.4	4.2	0.7				
mil	Min	51	5.9	193	166	236	150	20	37	24	4	
	Max	59	8.7	205	177	252	165	28				



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