Semi
Advanced Power Semiconductor

EABS21 THRU EABS26

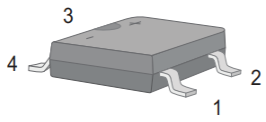
Surface Mount Super fast Recovery Bridge Rectifier
Reverse Voltage 100 to 600 Volts
Forward Current 2.0 Amperes

Features

- Super fast reverse recovery time
- Glass Passivated Chip Junction
- High current capability up to 2A
- Low reverse leakage
- High surge current capability
- Low profile package
- Lead free in comply with EU RoHS 2011/65/EU directives

PINNING

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



ABS/LBF Package

Mechanical Data

Case : ABS/LBF molded plastic body

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

Mounting Position : Any

Weight : 88mg/0.0031oz (approximate)

Maximum Ratings Characteristics

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

Parameter		Symbol	EABS21	EABS22	EABS24	EABS26	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	200	400	600	V
Maximum RMS voltage		V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	V
Maximum Average Rectified Output Current at T_C=125℃		$I_{F(AV)}$	2.0				A
Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load		I_{FSM}	60				A
Maximum instantaneous forward voltage at Io		V_F	0.95		1.25	1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_a = 25℃	I_R	5.0				uA
	T_a = 100℃		100				
Maximum Reverse Recovery Time(1)		t_{rr}	35				nS
Typical Junction Capacitance(2)		C_j	40				pF
Typical Thermal resistance(3)		$R_{\theta JA}$	80				℃/W
Operating Storage Temperature Range		T_J,T_{STG}	-55 to +150				℃

Note

(1) Reverse Recovery Time test condition : IF = 0.5A, IR = 1.0A, IRR = 0.25A

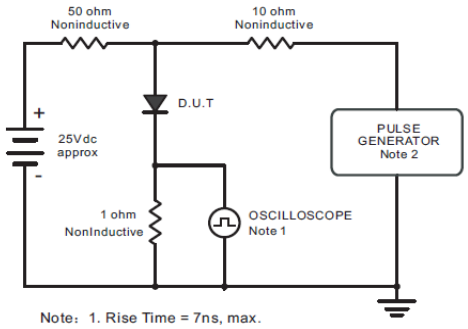
(2) Measured at 1 MHz and applied reverse voltage of 4.0 VDC

(3) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

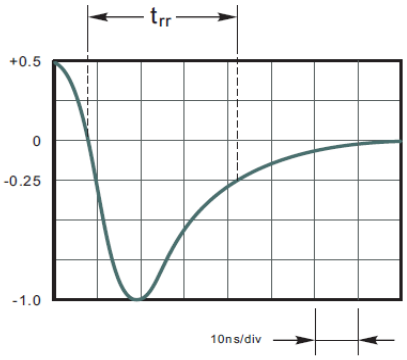
Characteristics Curves

(TA = 25℃ unless otherwise specified)

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7ns, max.
Input Impedance = 1megohm,22pF.
2. Ries Time =10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

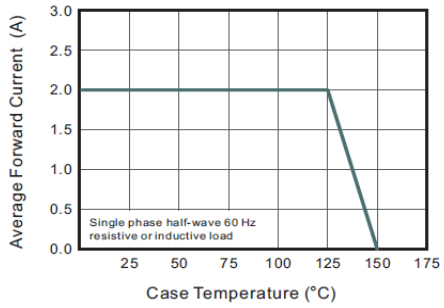


Fig.3 Typical Reverse Characteristics

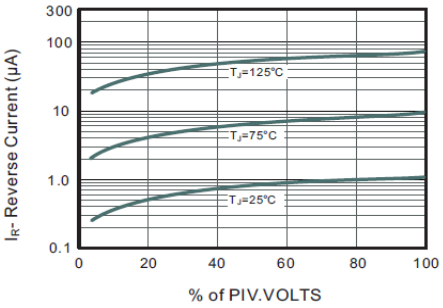


Fig.4 Typical Forward Characteristics

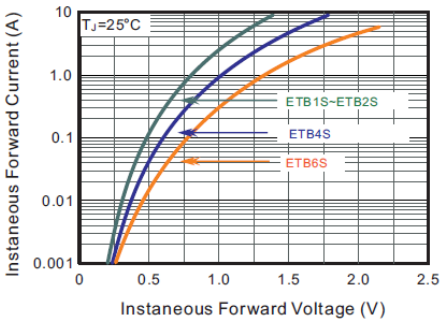


Fig.5 Typical Junction Capacitance

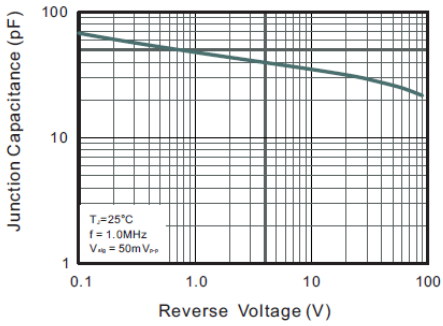
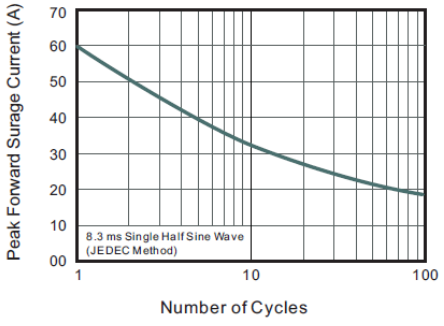


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current

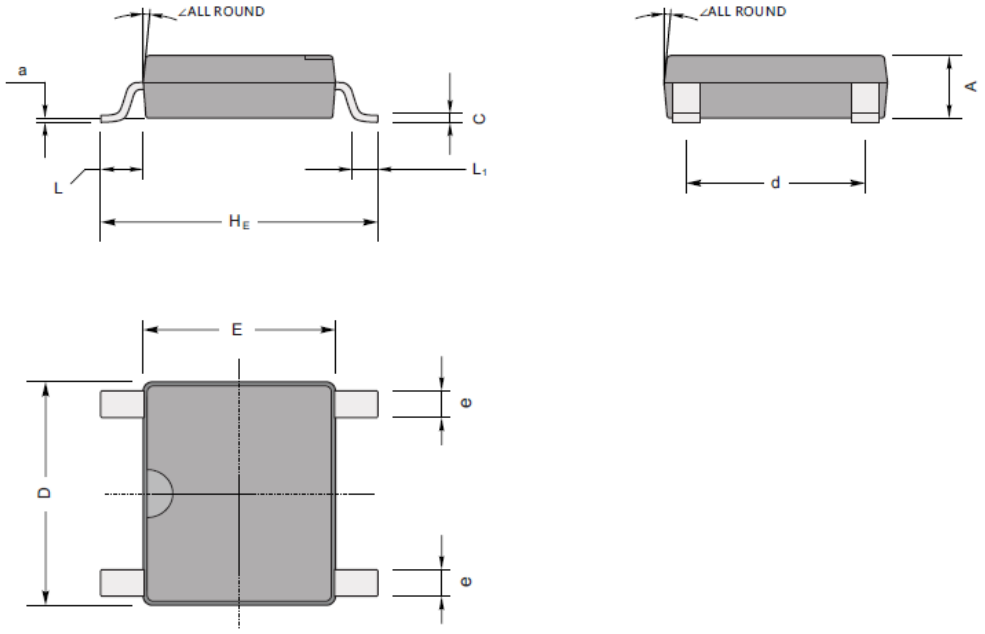


REV. 00

Package Dimension

ABS / LBF

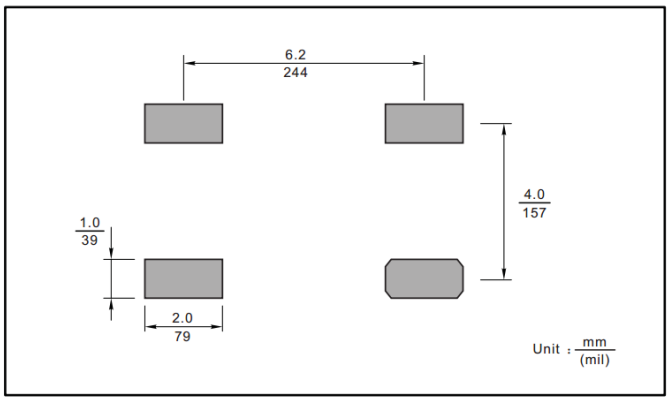
Plastic surface mounted package; 4 leads



ABS/LBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	∠
mm	max	1.5	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.3	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	59	8.7	205	177	252	165	28	37	24	4	
	min	51	5.9	193	166	236	150	20				

The recommended mounting pad size



Marking

Type number	Marking code
EABS21	EABS21
EABS22	EABS22
EABS24	EABS24
EABS26	EABS26

Revision History

No	Date	Contents
0	2022-12-07	Initial Brief Datasheet Release

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