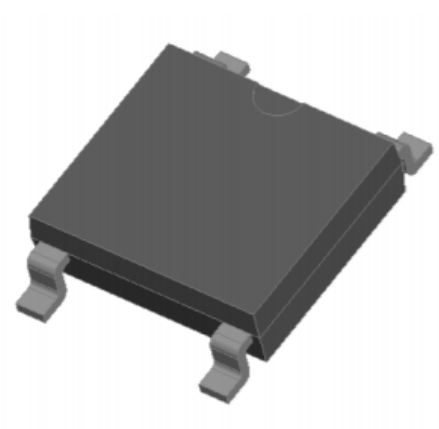
HABS10

Surface Mount High Efficient Bridge



FEATURES:

- Improve EMI conduction characteristics
- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 1.0 A
- Fast switching for high efficiency
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: ABS
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 82mg 0.0029oz

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	Symbols	HABS10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current	I_O	1.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A
Maximum Forward Voltage at 1.0 A	V_F	1.7	V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a =125 °C	I_R	5.0 100	μA
Typical Junction Capacitance (Note1)	C_j	15	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	75	°C/W
Maximum Reverse Recovery Time (Note3)	t_{rr}	75	ns
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.
3. Measured with I_F = 0.5 A, IR = 1 A, I_{rr} = 0.25 A.

Typical Characteristics

Fig.1 Average Rectified Output Current Derating Curve

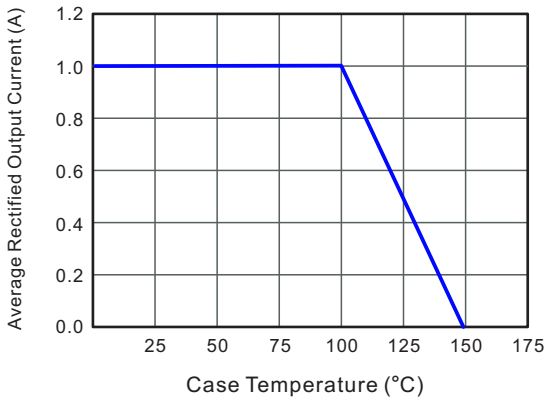


Fig.2 Typical Reverse Characteristics

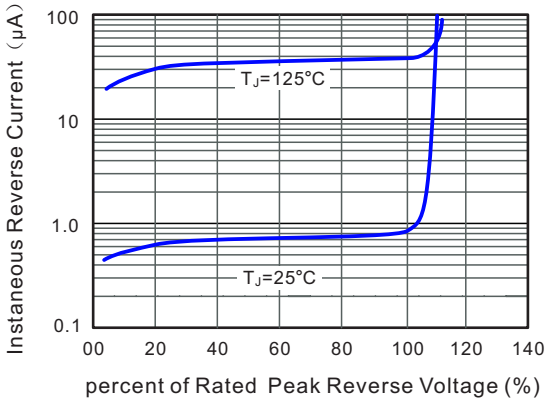


Fig.3 Typical Instaneous Forward Characteristics

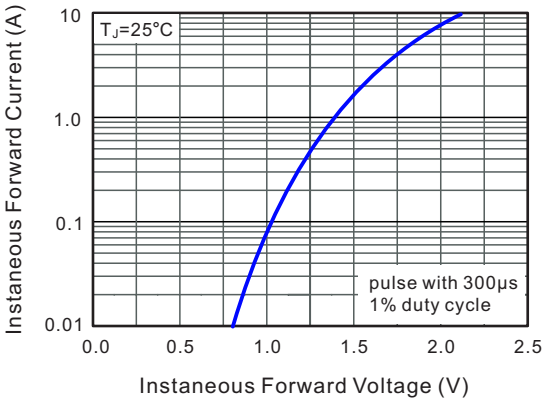


Fig.4 Typical Junction Capacitance

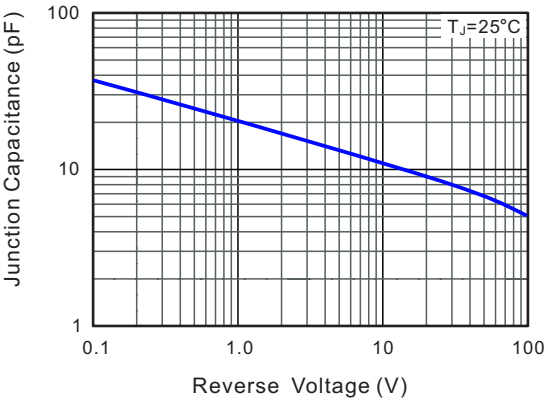
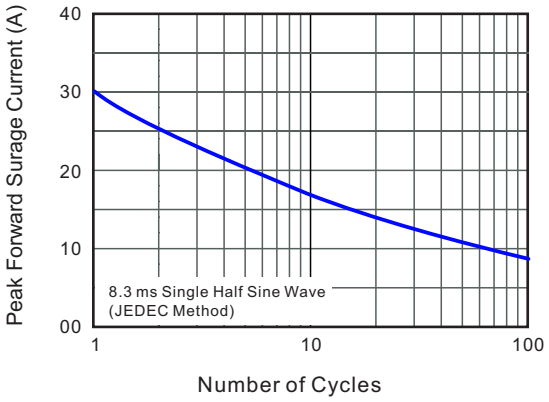


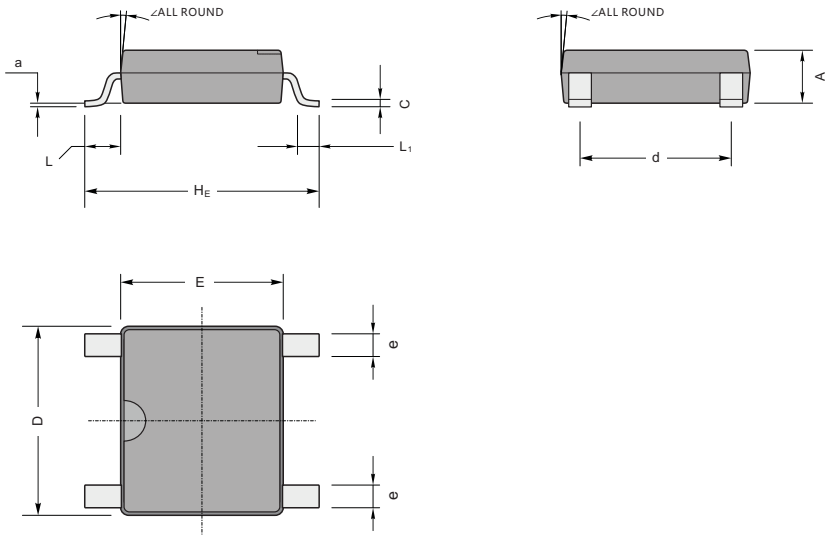
Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABS



echanical 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

