

SURFACE MOUNT BRIDGE RECTIFIER

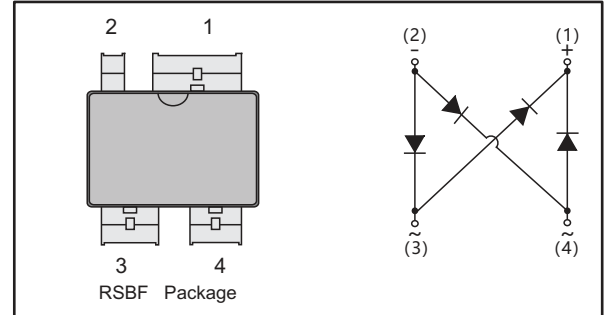
Reverse Voltage 100 to 1000 V Forward Current 8.0A

FEATURES:

- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: RSBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 2.745g / 0.0968oz



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

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

Parameter	Symbols	RSBFC 08B	RSBFC 08D	RSBFC 08G	RSBFC 08J	RSBFC 08K	RSBFC 08M	Units
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	I_o	8.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	180						A
I^2t Rating for Fusing $t=8.3ms$	I^2t	134						A ² S
Maximum Forward Voltage Per Diode at 4.0 A	V_F	1.0						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 100						μA
Typical Junction Capacitance (Note1)	C_j	45						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	25 5 10						°C/W
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 4×3.81cm ×3.81cm copper pad.

RATING AND CHARACTERISTICS CURVES (RSBFC08B THRU RSBFC08M)

Fig.1 Average Rectified Output Current Derating Curve

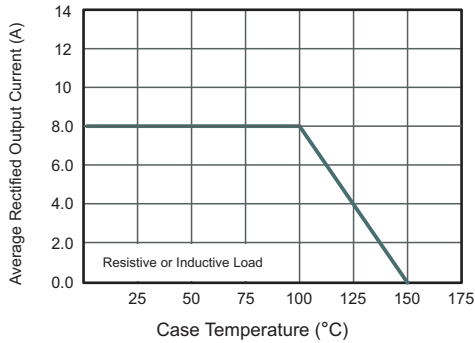


Fig.2 Typical Reverse Characteristics

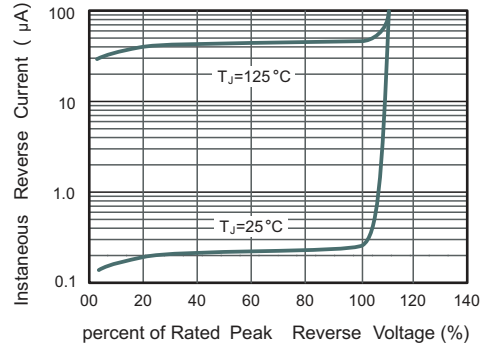


Fig.3 Typical Instantaneous Forward Characteristics

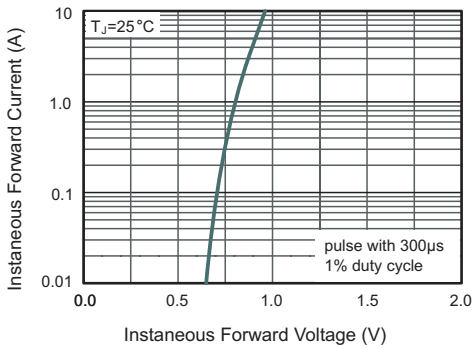


Fig.4 Typical Junction Capacitance

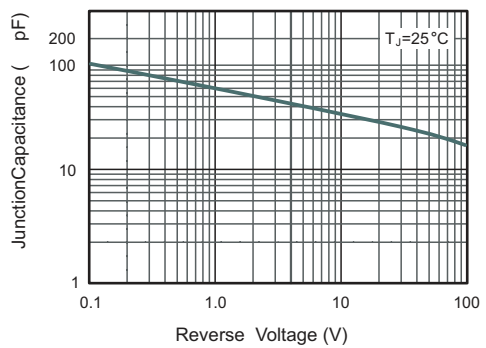
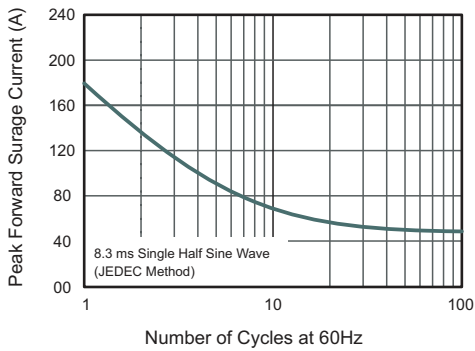


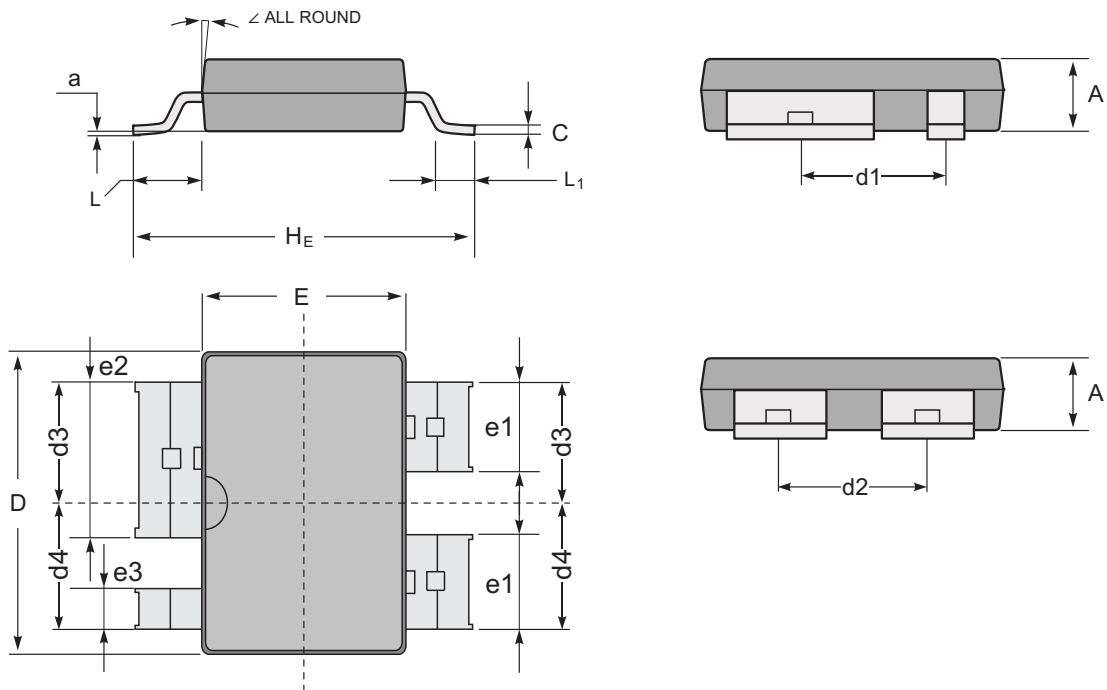
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

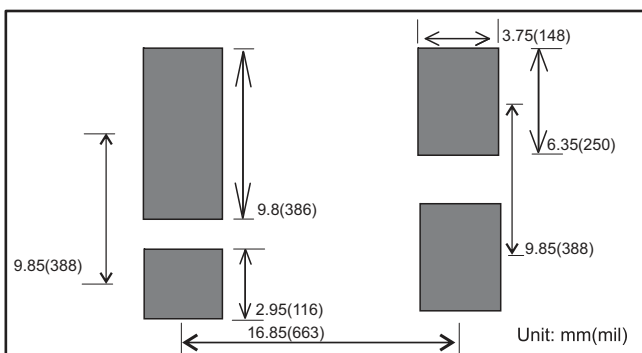
RSBF



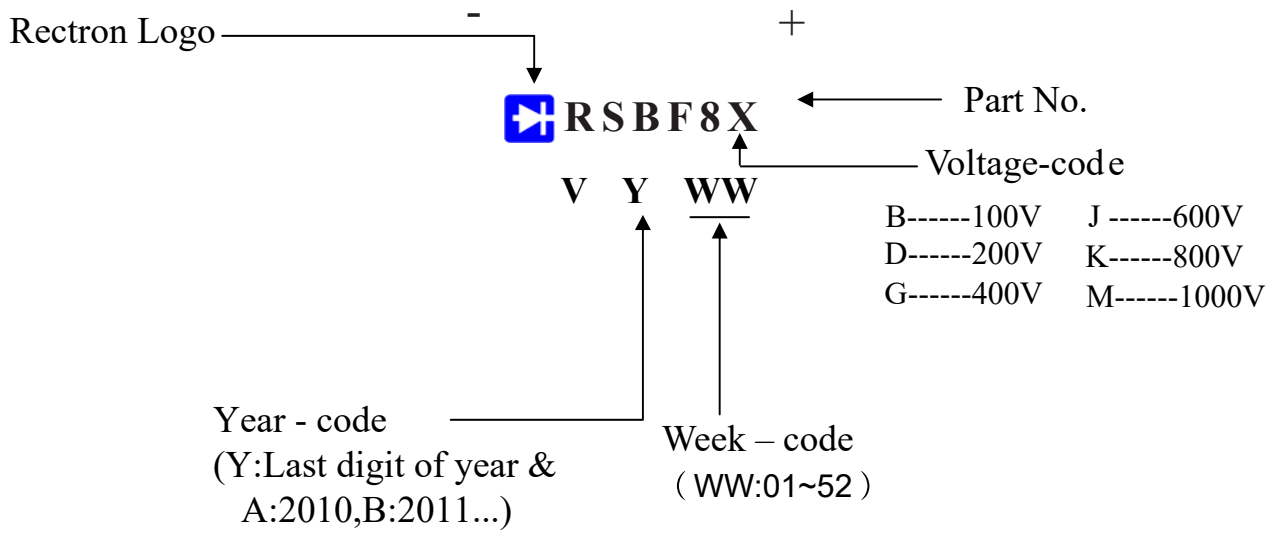
Mechanical data

Unit		A	C	D	E	HE	e1	e2	e3	d1	d2	d3	d4	L	L1	a	∠
mm	max	3.9	0.50	20.9	13.6	20.5	6.35	9.8	2.95	9.85		8.0	3.85	2.72	0.19 (ref.)	12°	
	nom	3.6	0.40	20.4	13.1	20.0	6.05	9.5	2.65	9.55		7.8	3.45	2.32			
	min	3.3	0.30	19.9	12.6	19.5	5.75	9.2	2.35	9.25		7.6	3.05	1.92			
mil	max	153.5	19.7	822.8	535.4	807.1	250.0	385.8	116.1	387.8		315.0	151.6	107.1	7.5 (ref.)	12°	
	nom	141.7	15.8	803.1	515.7	787.4	238.2	374.0	104.3	376.0		307.1	135.8	91.3			
	min	129.9	11.8	783.5	496.1	767.7	226.4	362.2	92.5	364.2		299.2	120.1	75.6			

The recommended mounting pad size

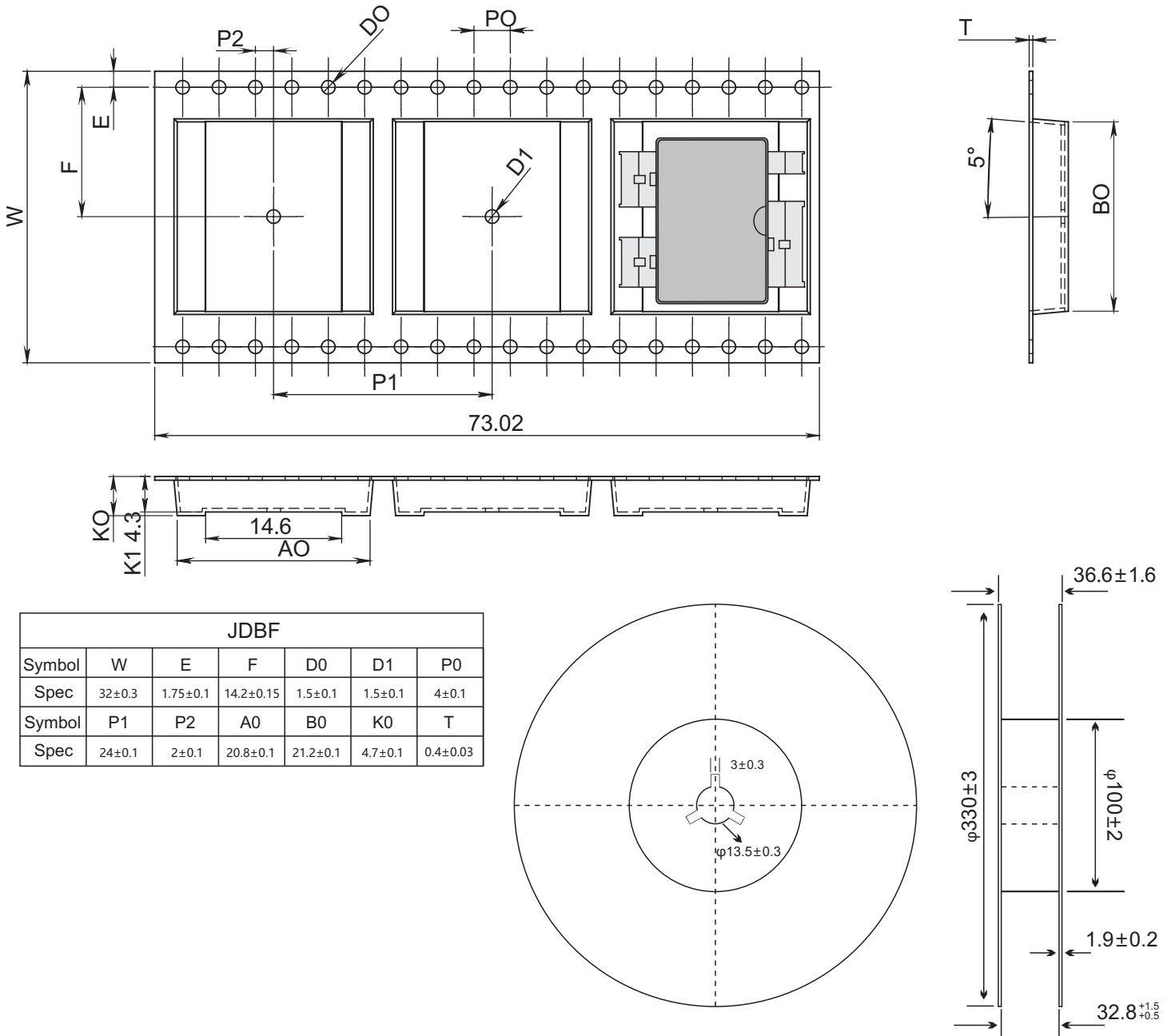


Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

Tape data(unit:mm)



JDBF						
Symbol	W	E	F	D0	D1	P0
Spec	32±0.3	1.75±0.1	14.2±0.15	1.5±0.1	1.5±0.1	4±0.1
Symbol	P1	P2	A0	B0	K0	T
Spec	24±0.1	2±0.1	20.8±0.1	21.2±0.1	4.7±0.1	0.4±0.03

REEL PACK

PACKAGE	PACKING CODE	PER REEL (EA)	REEL DIA (mm)	INNER BOX (EA)	BOX SIZE (mm)	CARTON SIZE (mm)	PER CARTON (EA)
RSBF	-W	600	330	600	336*336*50	360*360*280	3,000

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