

TB34S~TB320S

Rev.A Jan.-2024

3.0A

ABS/LBF

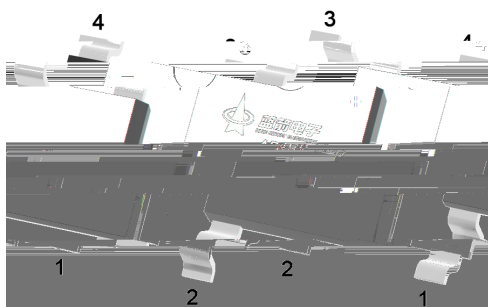
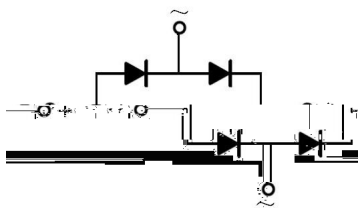
3.0A Surface Mount Schottky Bridge Rectifier, ABS/LBF thin package.

40V~200V

3.0A

Reverse Voltage: 40 to 200V, Forward Current: 3.0A, High Surge Current Capability, Designed for Surface Mount Application, HF product.

General purpose.



/ Marking

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating					Unit
		TB34S	TB36S	TB38S	TB310S	TB320S	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	60	80	100	200	V
Maximum RMS Voltage	V _{RMS}	28	42	56	80	160	V
Maximum DC Blocking Voltage	V _{DC}	40	60	80	100	200	V
Average Rectified Output Current at T _C = 100℃	I _{F(AV)}	3.0					A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	80		70			A
Typical Junction Capacitance ^(Note1)	C _j	250	160				pF
Typical Thermal Resistance ^(Note2)	R _{θJA}	60					℃/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55~150					℃

Note:

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with $4 \times 1.5'' \times 1.5''$ (3.81×3.81 cm) copper pad.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating					Unit
			TB34S	TB36S	TB38S	TB310S	TB320S	
Forward Voltage per element	V _F	I _F =3.0A	0.55	0.70	0.85		0.95	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I _R	T _a =25℃	0.5	0.3				mA
		T _a =100℃	10	5				mA

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

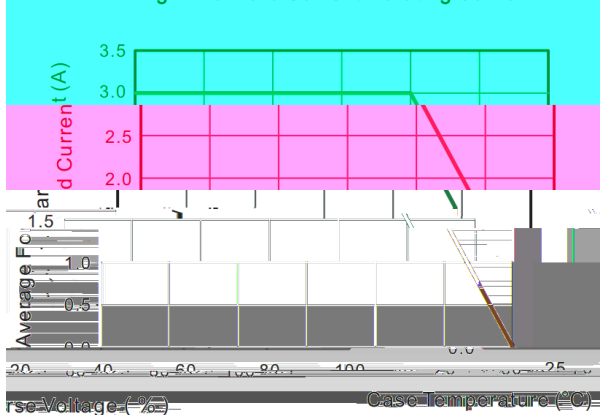


Fig.2 Typical Reverse Characteristics

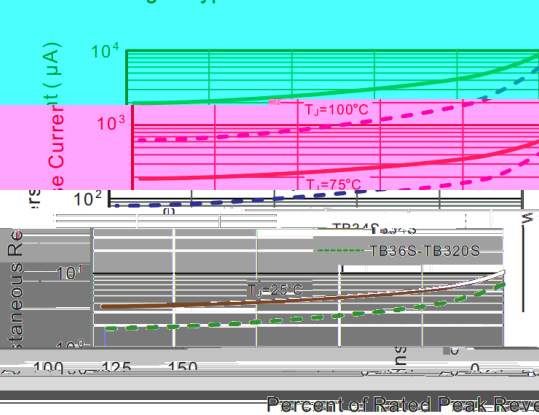


Fig.3 Typical Forward Characteristic

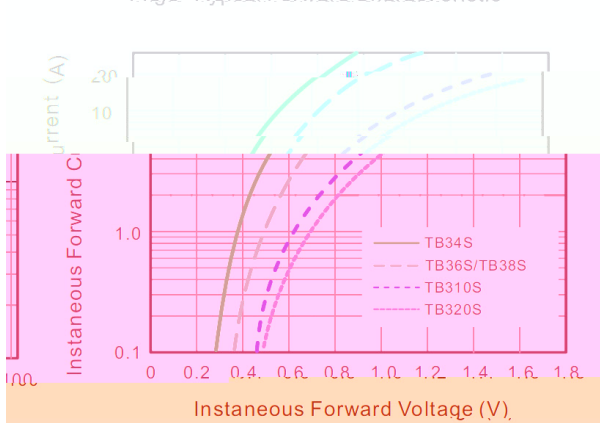


Fig.4 Typical Junction Capacitance

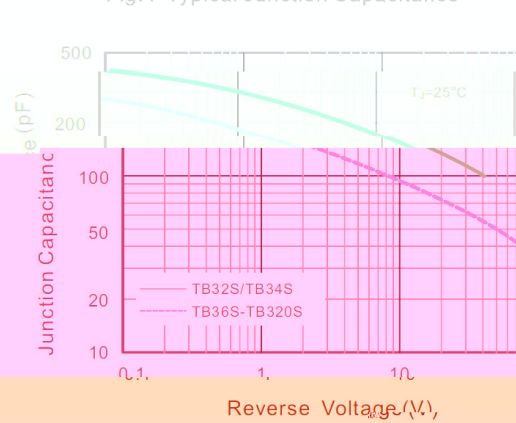
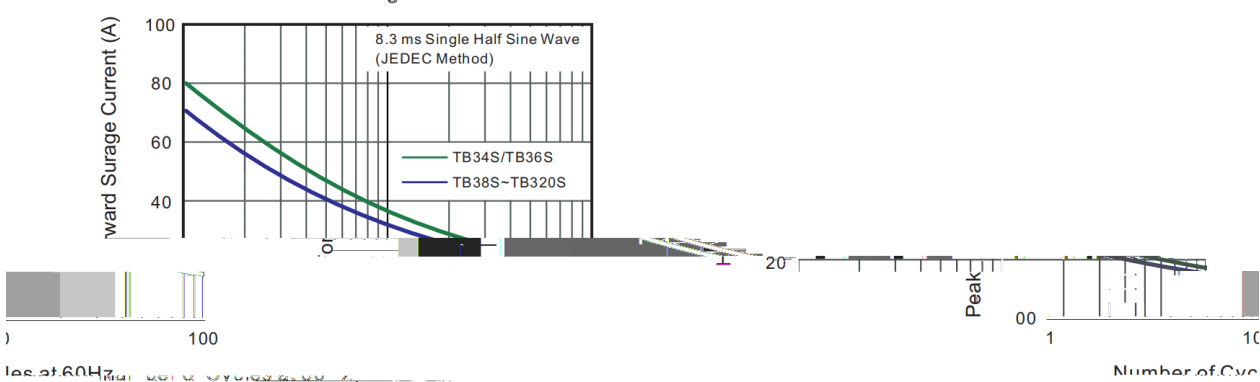
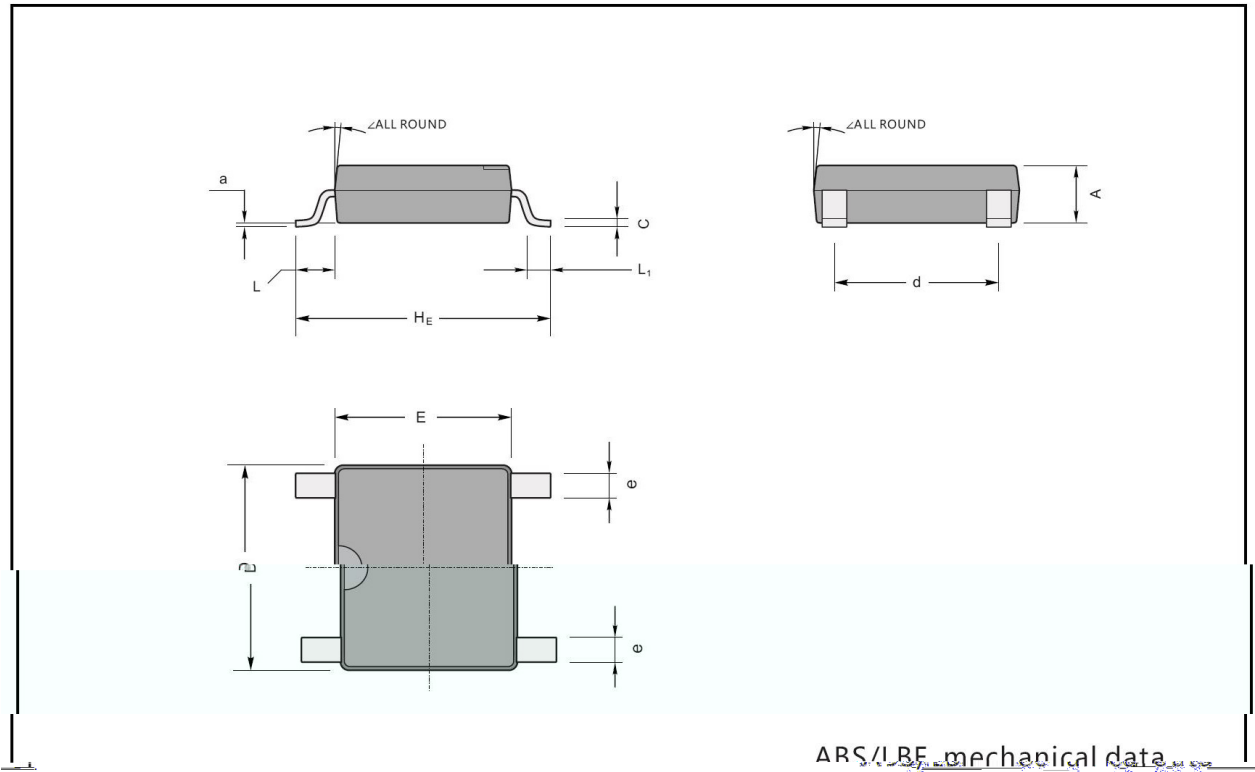


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



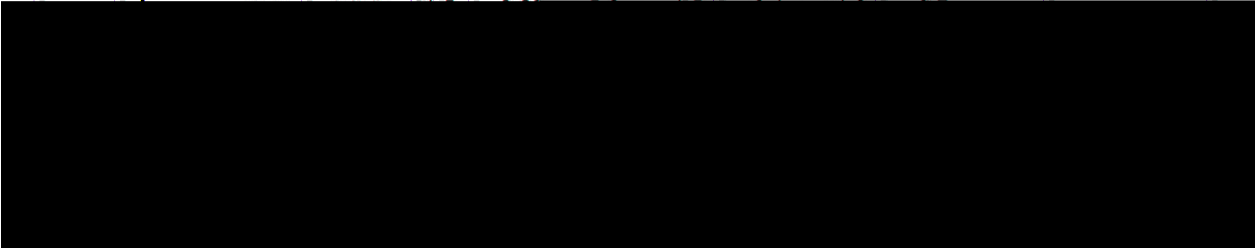
/ Package Dimensions

ABS/LBF



ABS/LBF mechanical data

UNIT		A	C	D	E	H _E	d	e	L	L ₁	a	∠



/ Marking Instructions



TB34S

Note:

TB34S	Product Type
****	Lot No. Code, code change with Lot No

Marking

Type number	Marking code
TB34S	TB34S
TB36S	TB36S
TB38S	TB38S
TB310S	TB310S
TB320S	TB320S

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

- Note:
- 1

150 180 60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245±5 5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5℃ Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box