

TB34S~TB320S

Rev.A Jan.-2024

描述 / Descriptions

3.0A 表面贴装肖特基整流桥，薄型 ABS/LBF 封装。

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

特征 / Features

反向电压：40V~200V，正向电流：3.0A，浪涌电流大，适用于表面贴装，无卤产品。

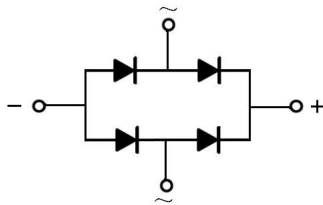
Reverse Voltage: 40 to 200V, Forward Current: 3.0A, High Surge Current Capability, Designed for Surface Mount Application, HF product.

用途 / Applications

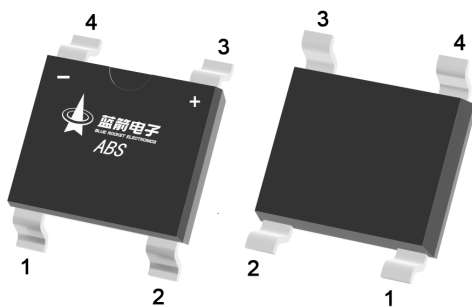
一般用途。

General purpose.

内部等效电路 / Equivalent Circuit

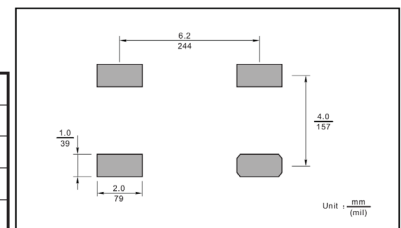


引脚排列 / Pinning



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

The recommended mounting pad size



印章代码 / Marking

见印章说明。

See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating					单位 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 $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	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)	$R_{\theta JA}$	60					°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 $4 \times 1.5'' \times 1.5''$ (3.81×3.81 cm) copper pad.

电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating					单位 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	$T_a=25^\circ\text{C}$	0.5	0.3				mA
		$T_a=100^\circ\text{C}$	10	5				mA

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

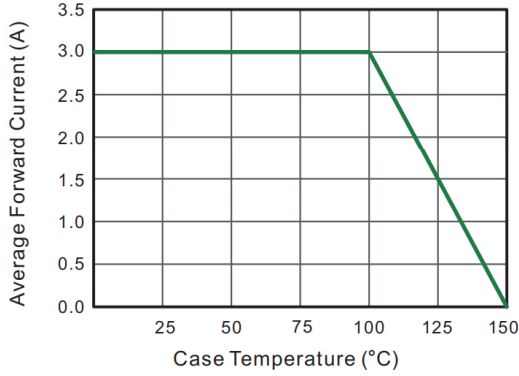


Fig.2 Typical Reverse Characteristics

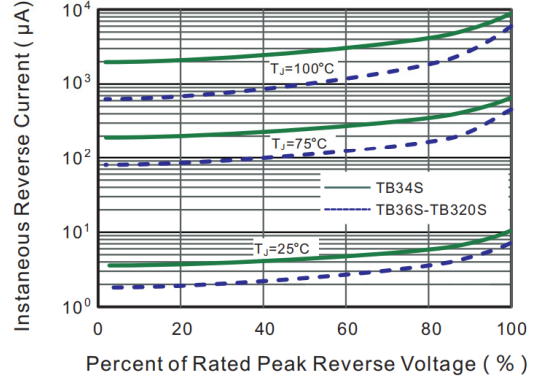


Fig.3 Typical Forward Characteristic

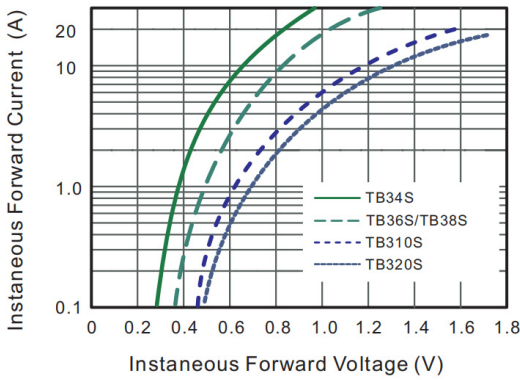


Fig.4 Typical Junction Capacitance

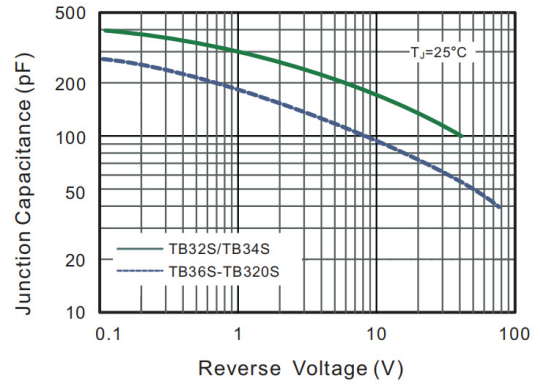
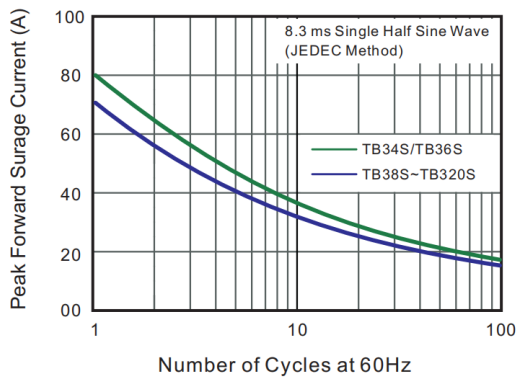
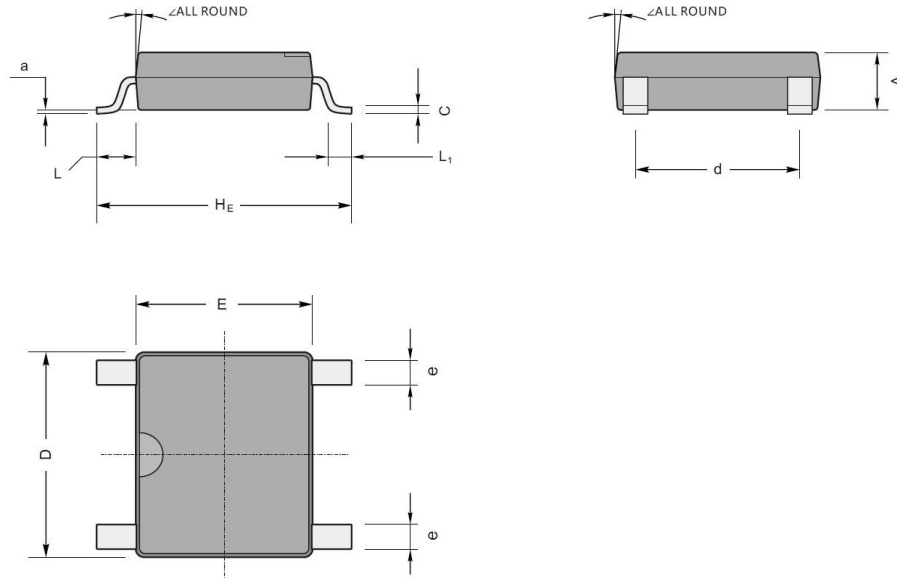


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



外形尺寸图 / Package Dimensions

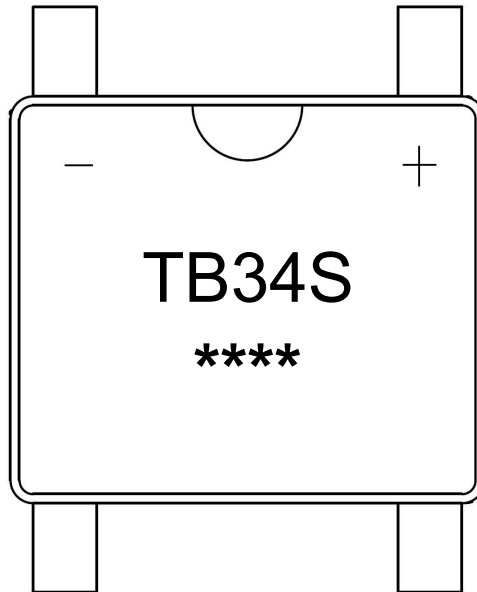
ABS/LBF



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	8	
	min	51	5.9	193	166	236	150	20				

印章说明 / Marking Instructions



说明

TB34S : 为产品型号

**** : 为生产批号代码，随生产批号变化

Note:

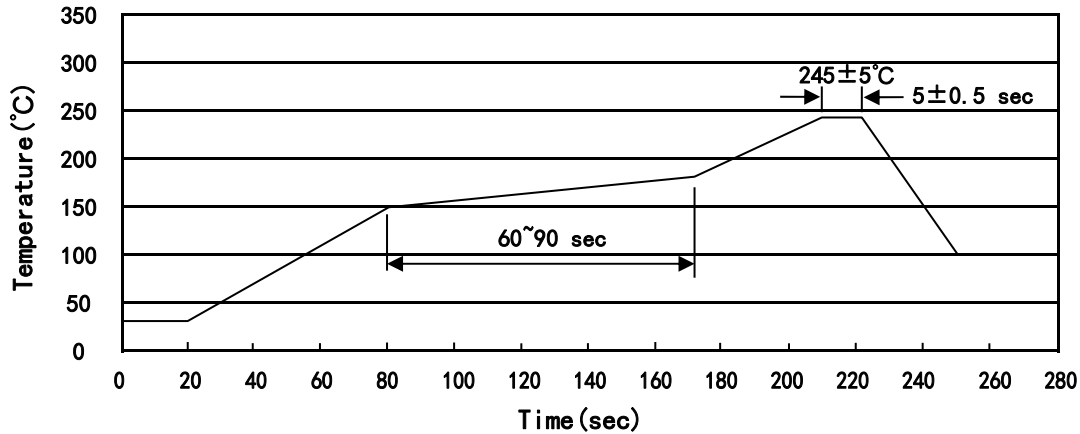
TB34S : Product Type

**** : Lot No. Code, code change with Lot No

Marking

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

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
ABS/LBF	5,000	2	10,000	7	70,000	13" ×12	336X336X40	380X335X366

使用说明 / Notices