

/ Descriptions

SOT-23 Schottky diodes in a SOT-23 Plastic Package.

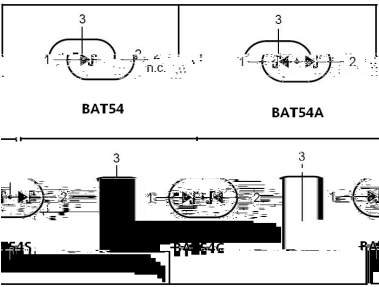
/ Features

Schottky diodes, HF Product.

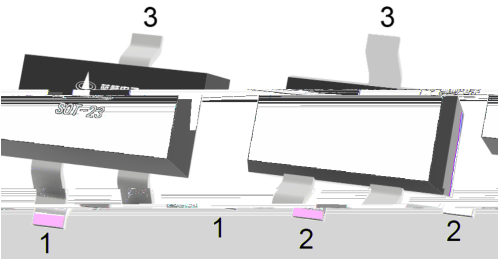
/ Applications

Low forward and reverse recovery times.

/ Equivalent Circuit



/ Pinning



PIN: See Equivalent Circuit.

/ Marking

Model	BAT54	BAT54A	BAT54C	BAT54S
Marking	HL4P	HL42	HL43	HL44

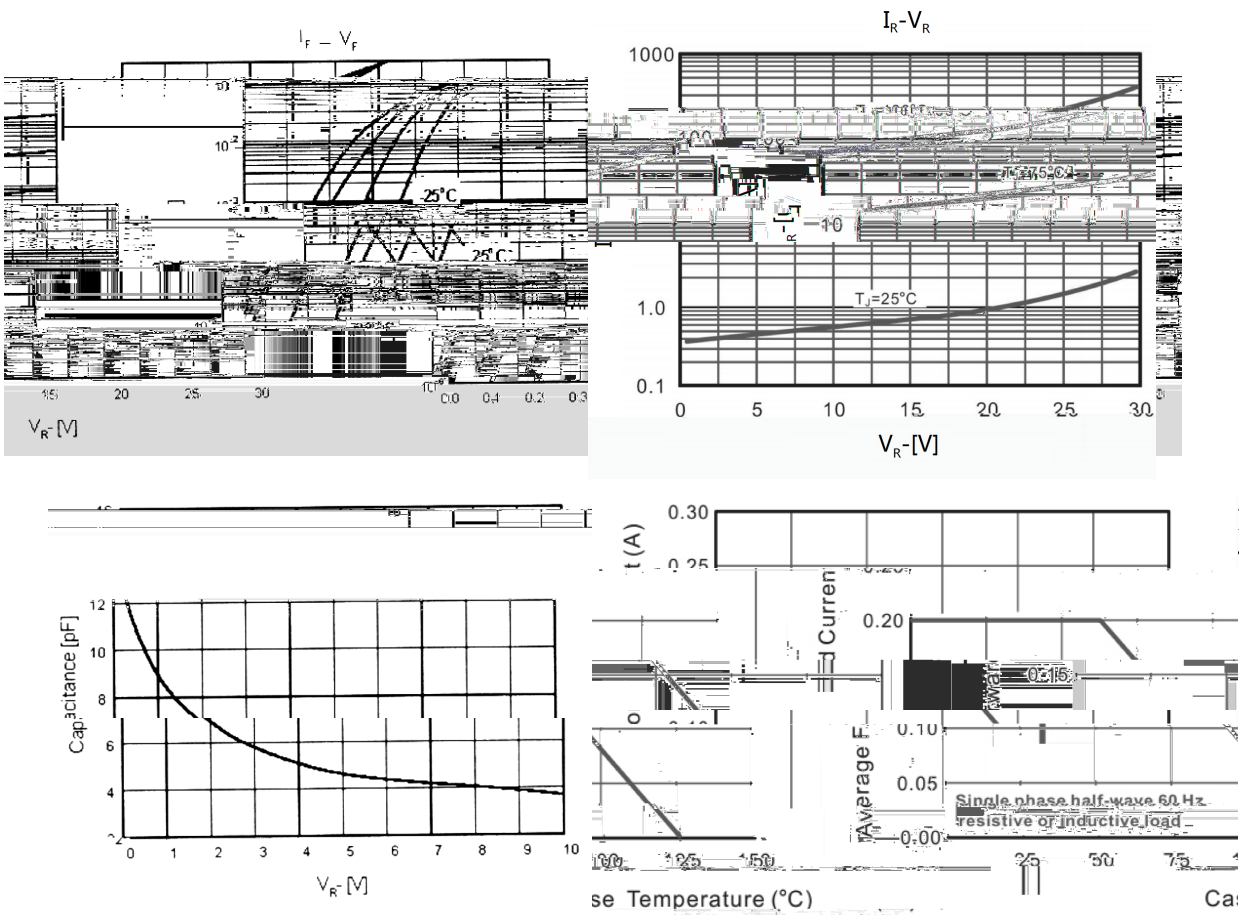
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_{RRM}	30	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	600	mA
Power Dissipation	P_D	290	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	430	/W
Junction Temperature	T_j	125	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_R	$I_R=10\mu A$	30			V
Forward Voltage	V_F	$I_F=0.1mA$			240	mV
		$I_F=1.0mA$			320	mV
		$I_F=10mA$			400	mV
		$I_F=30mA$			500	mV
		$I_F=100mA$			0.8	V
Instantaneous Reverse Current	I_R	$V_R=25V$			2.0	μA
Total Capacitance	C_T	$V_R=1.0V$ $f=1.0MHz$			10	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$ $I_{RR}=1.0mA$ $R_L=100\Omega$			5.0	ns

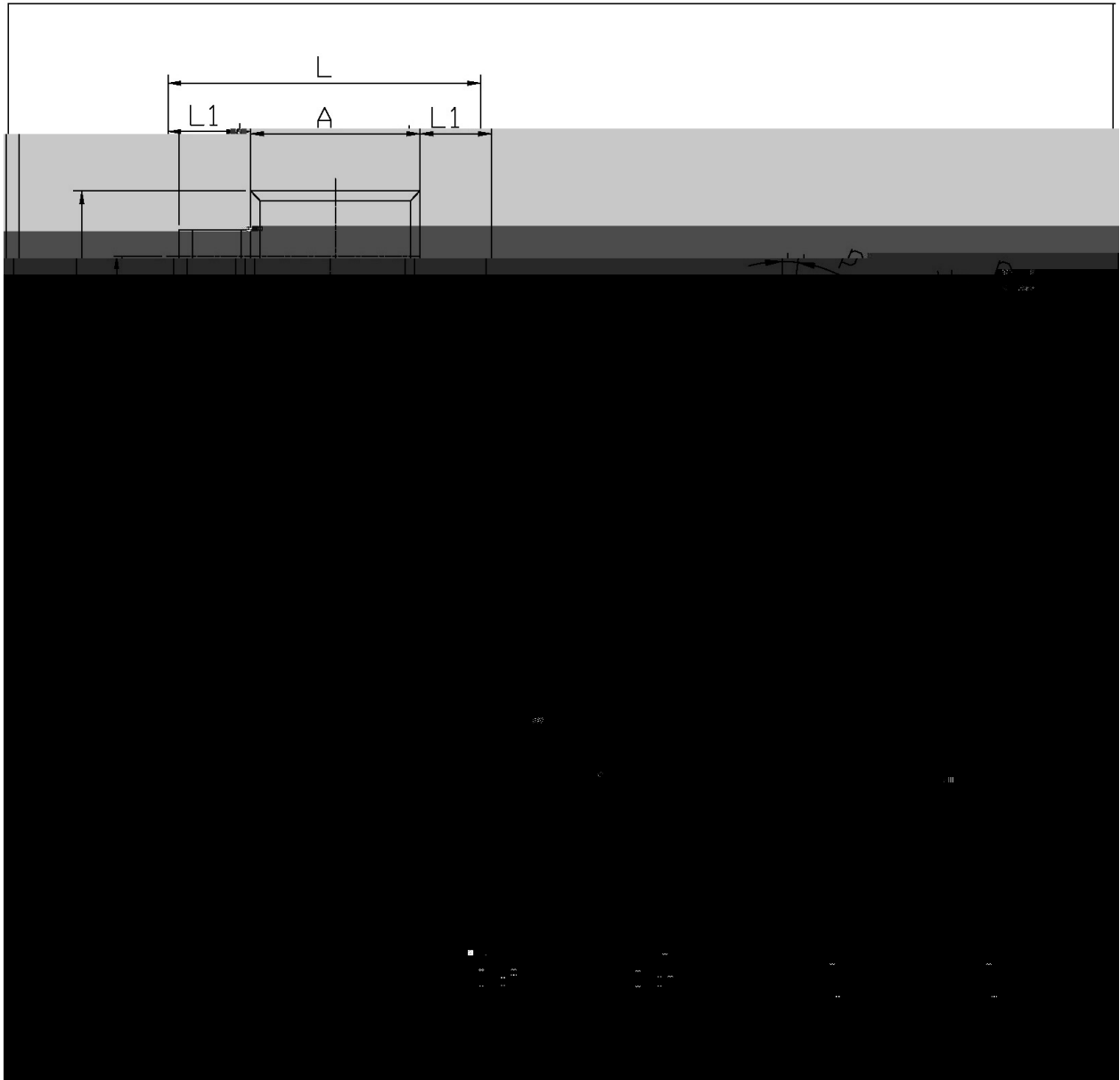
/ Electrical Characteristic Curve

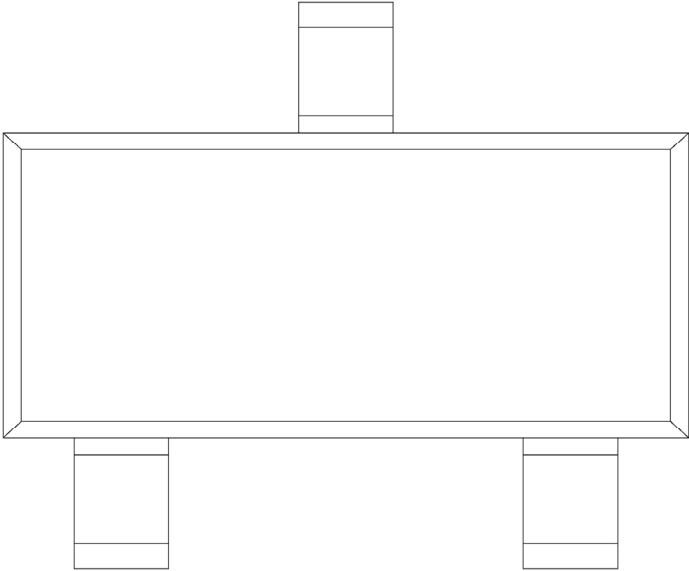


/ Package Dimensions

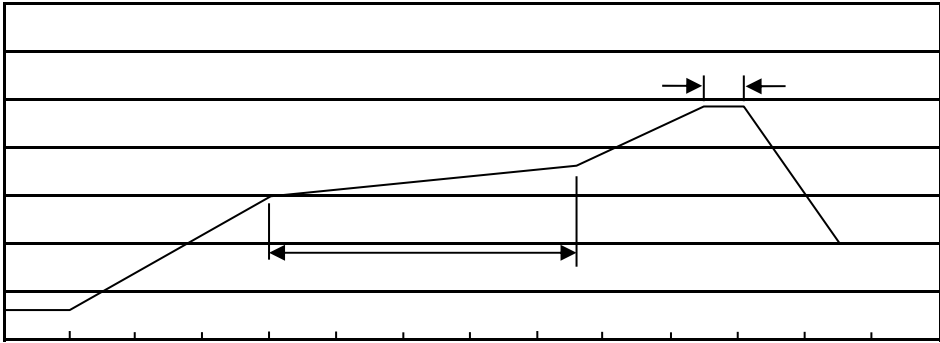
SOT-23

单位: mm





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- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10 /sec.
- Note:

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

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

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)		
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices