

Descriptions

The BAT54 /A/C/S is schottky barrier diode, SOT-23 plastic package.

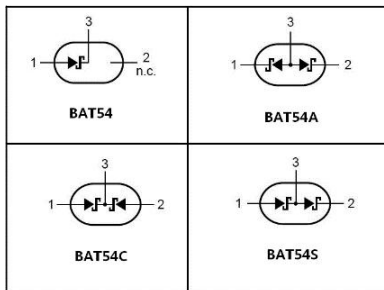
Features

- Schottky diodes
- Halogen-free 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

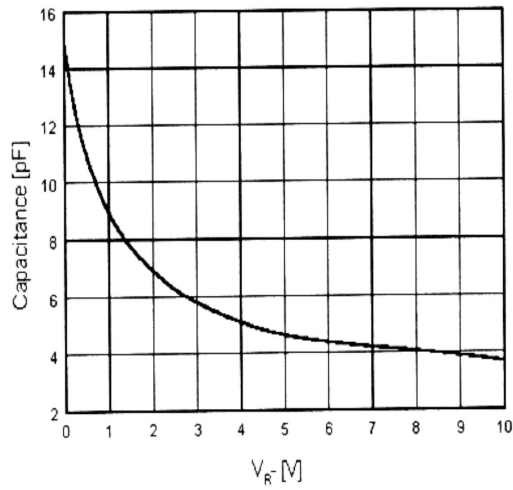
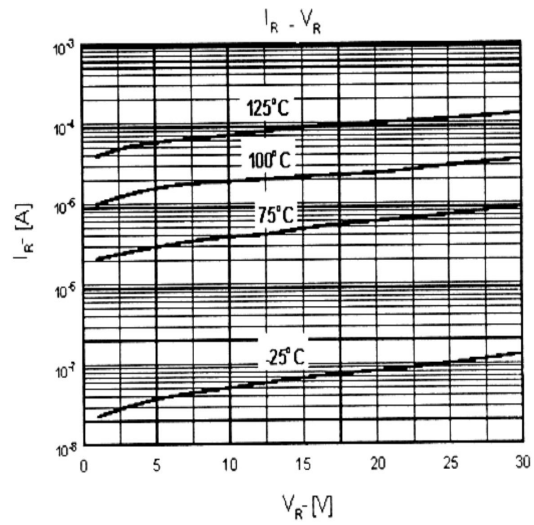
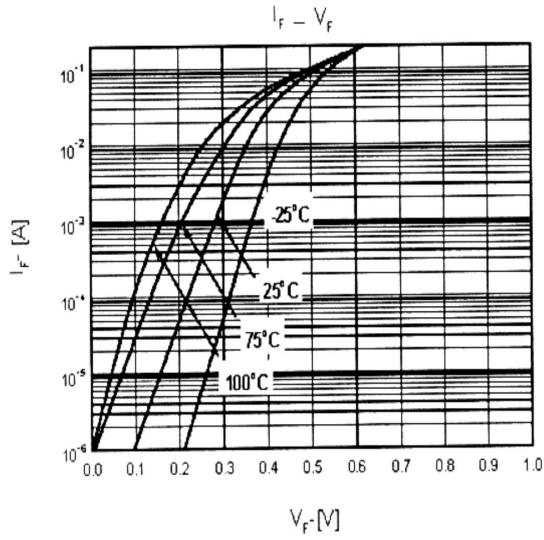
Absolute Maximum Ratings(Ta=25°C)

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	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

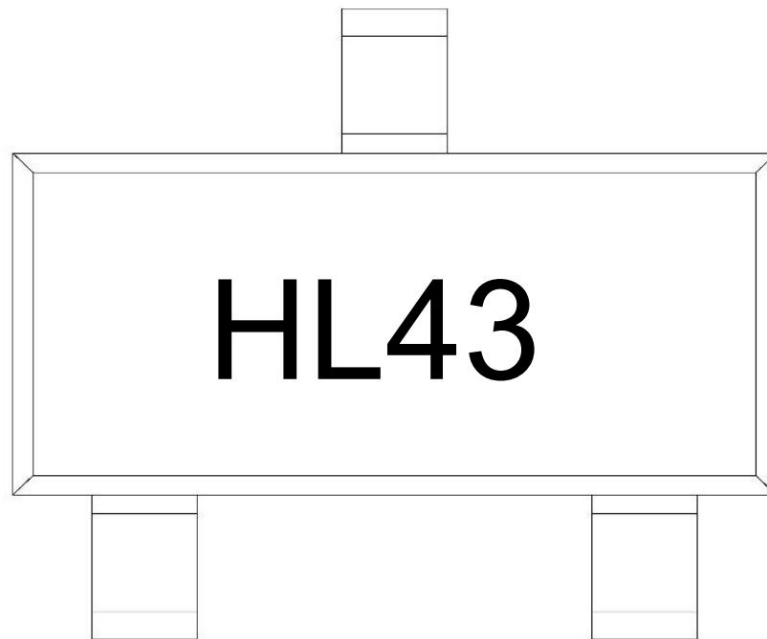
Electrical Characteristics(Ta=25°C)

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}	$I_F=10mA$ $I_{RR}=1.0mA$ $R_L=100\Omega$			5.0	ns

Electrical Characteristic Curve



Marking instructions



Note:
 H: Company Code.
 L43: Product Type Code.

Model	BAT54	BAT54A	BAT54C	BAT54S
Marking	HL4P	HL42	HL43	HL44

Package Outline Dimensions

SOT-23

单位: mm

