

/ Descriptions

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

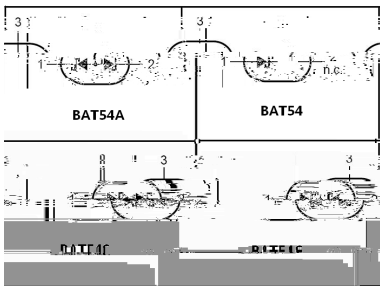
/ Features

Schottky diodes, HF Product.

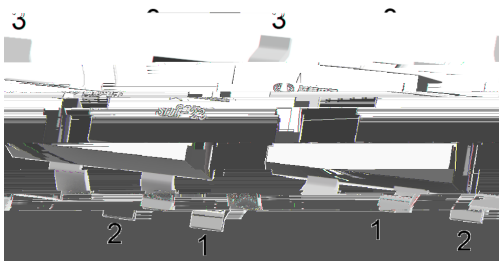
/ Applications

Low forward and reverse recovery times.

/ Equivalent Circuit



/ Pinning



PIN: See Equivalent Circuit.

/ Marking

Model	BAT54	BAT54A	BAT54C	BAT54S
Marking	HL4P	HL42	HL43	HL44

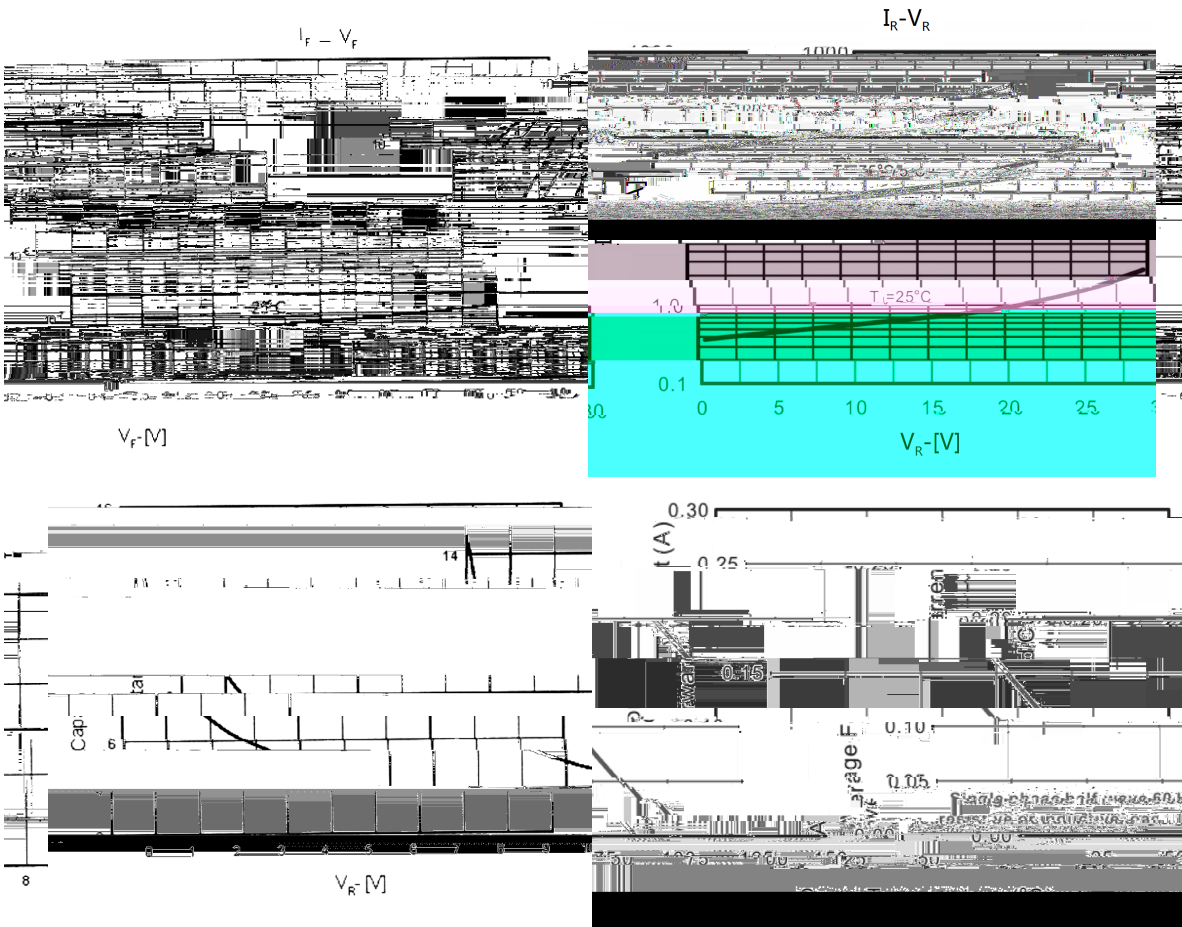
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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_{JA}	430	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_j	125	
Storage Temperature Range	T_{stg}	-55 ~ 150	

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

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

/ Electrical Characteristic Curve



/ Package Dimensions

SOT-23

单位: mm

