

# BAT54/A/C/S

Rev.1 Jun.-2024

## / Descriptions

SOT-23

Schottky diodes in a SOT-23 Plastic Package.

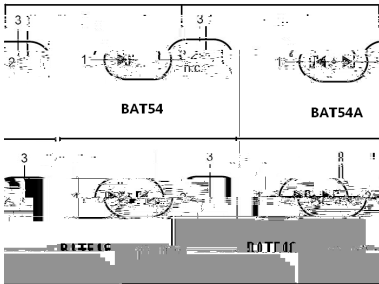
## / Features

Schottky diodes, HF Product.

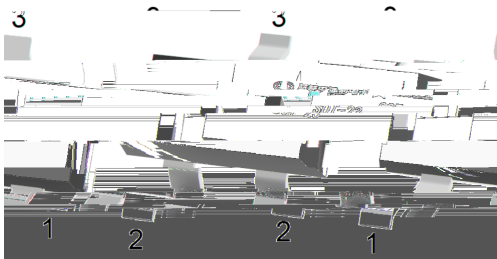
## / Applications

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	$R_{JA}$	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	$V_R$	$I_R=10\text{ A}$	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	A
Total Capacitance	$C_T$	$V_R=1.0\text{V}$ $f=1.0\text{MHz}$			10	pF
Reverse Recovery Time	$t_{rr}$	$I_F=10\text{mA}$ $I_{RR}=1.0\text{mA}$ $R_L=100$			5.0	ns



/ Package Dimensions

SOT-23

单位: mm

