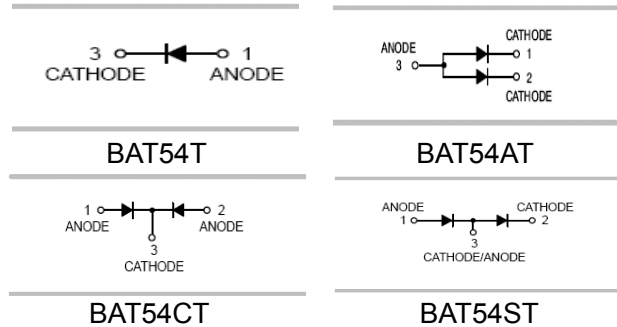


# Surface Mount Schottky Barrier Diode

# BAT54T/AT/CT/ST

## FEATURES

- Low forward voltage drop.
- Fast switching.
- Ultra-small surface mount package.
- PN junction guard ring for transient and ESD protection.



## APPLICATIONS

- Schottky barrier diodes.



**SOT-523**

## ORDERING INFORMATION

Type No.	Marking	Package Code
BAT54T	L1	SOT-523
BAT54AT	L2	SOT-523
BAT54CT	L3	SOT-523
BAT54ST	L4	SOT-523

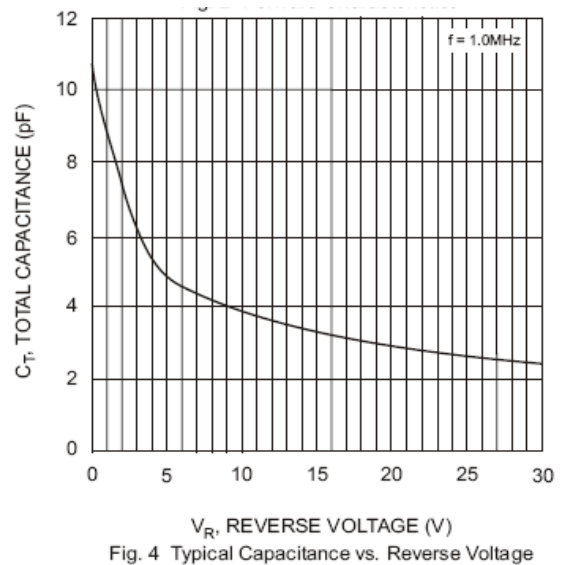
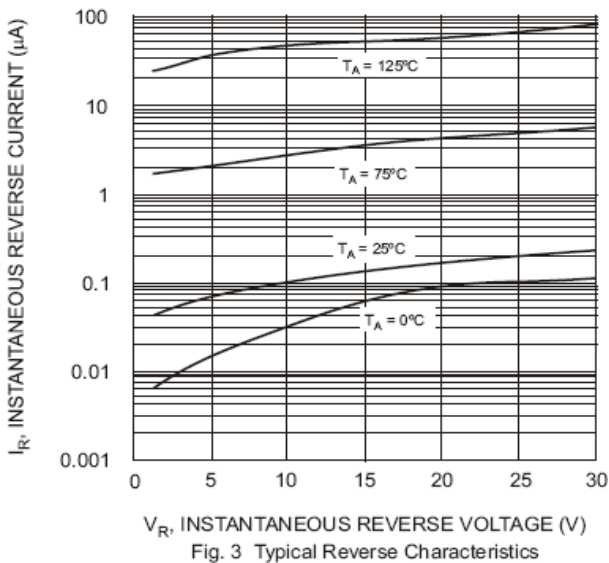
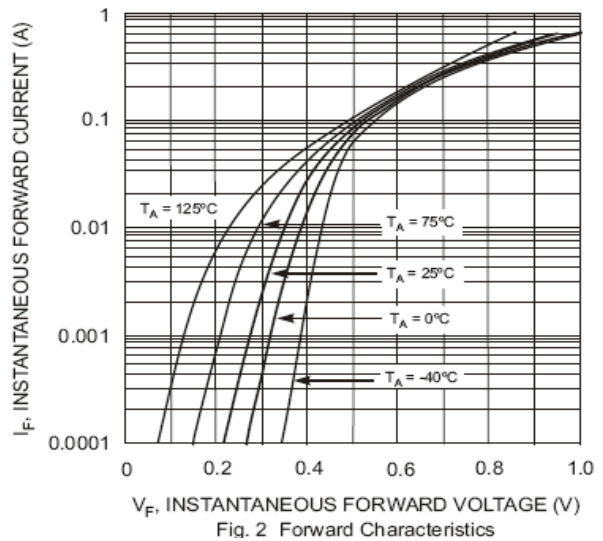
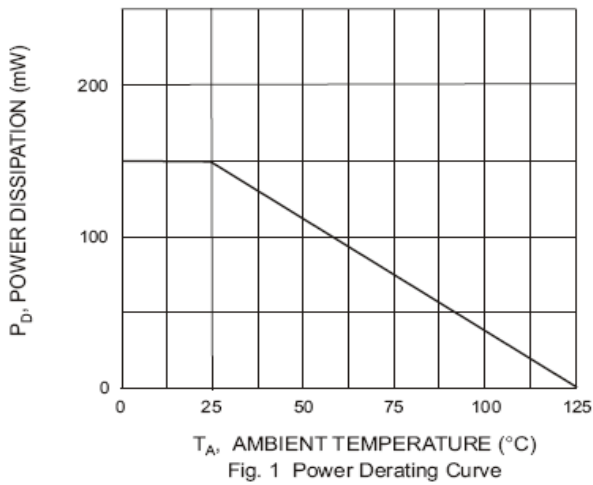
## MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
$V_{RRM}$	Peak repetitive reverse voltage	30	V
$V_{RWM}$	Working peak reverse voltage		
$V_R$	DC reverse voltage		
$I_F$	Forward continuous voltage	200	mA
$I_{FRM}$	Repetitive peak forward voltage	300	mA
$I_{FSM}$	Non-repetitive peak forward surge current @t<1.0s	600	mA
$P_d$	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance junction to ambient	833	°C/W
$T_j, T_{stg}$	Junction and Storage Temperature	-65 to +125	°C

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	30		V
Leakage current	$I_R$	$V_R=25V$		2.0	$\mu A$
Forward voltage	$V_F$	$I_F=0.1mA$		240	mV
		$I_F=1.0mA$		320	
		$I_F=10mA$		400	
		$I_F=30mA$		500	
		$I_F=100mA$		1000	
Typical total capacitance	$C_T$	$V_R=1.0V, f=1MHz$		10	pF
Reverse recovery Time	$t_{rr}$	$I_F=I_R=10mA, to I_R=1.0mA R_L=100\Omega$		5.0	ns

## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



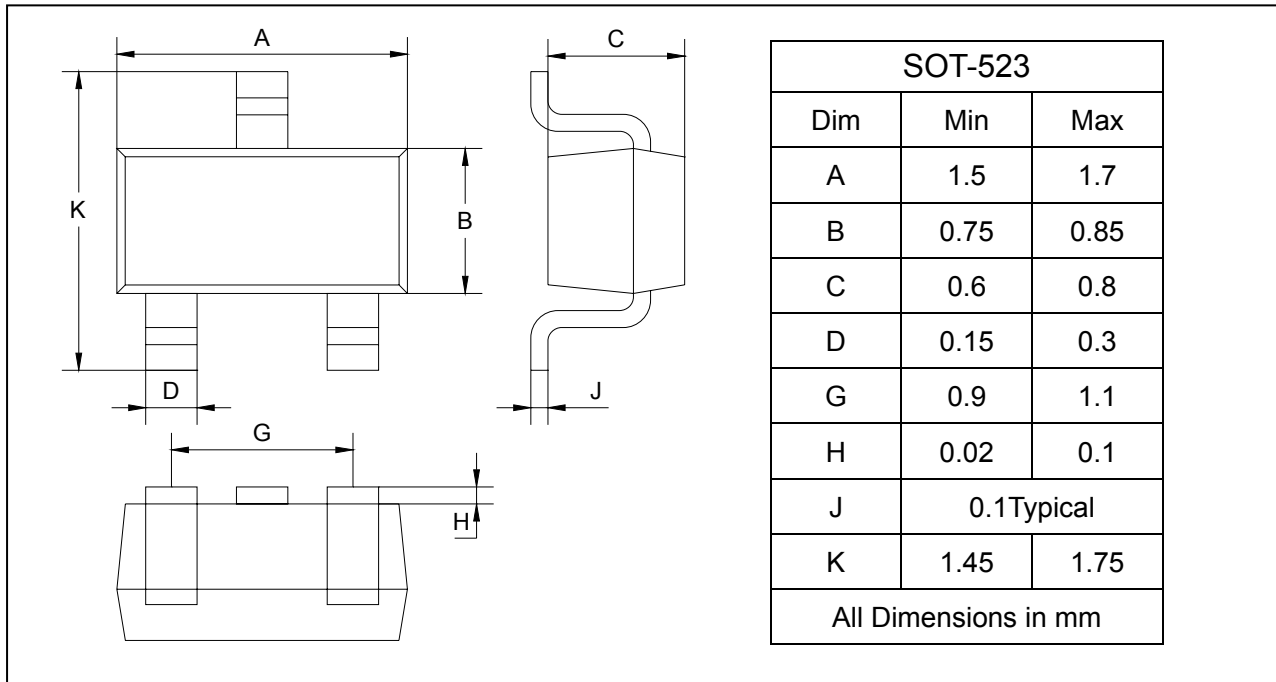
# Surface Mount Schottky Barrier Diode

# BAT54T/AT/CT/ST

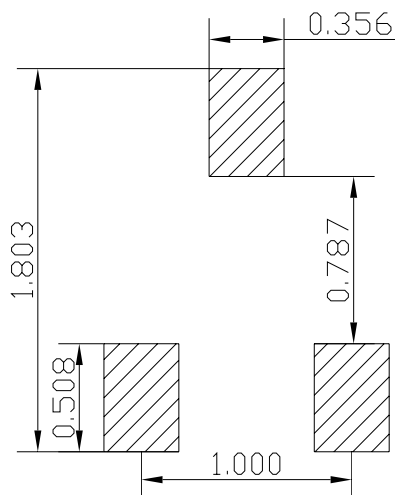
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-523



## SOLDERING FOOTPRINT



Unit : mm

## PACKAGE INFORMATION

Device	Package	Shipping
BAT54T/AT/CT/ST	SOT-523	3000/Tape&Reel