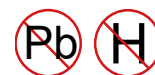




# YEA SHIN TECHNOLOGY CO., LTD

## Schottky Barrier Diodes

BAT54WS



### FEATURES

- ◆ High Current Capability
- ◆ Low Forward Voltage Drop

### MECHANICAL DATA

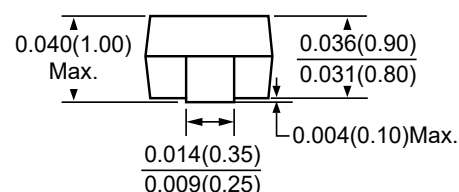
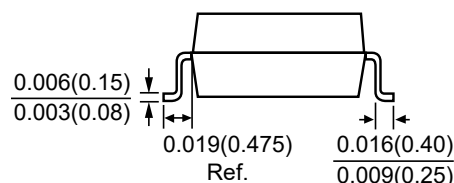
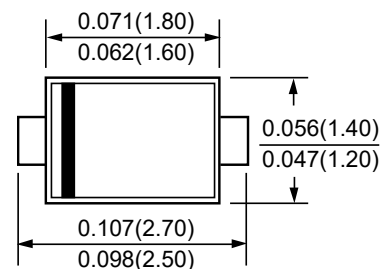
- ◆ SOD-323 Small Outline Plastic Package
- ◆ Polarity : Color Band Denotes Cathode End
- ◆ Terminals : Plated Terminals, Solderable
- ◆ Epoxy UL : 94V-0
- ◆ Mounting Position : Any

### ODERING INFORMATION

Device	Marking	Shipping
BAT54WS	L9	3000 / Tape & Reel

SOD-323

Unit:inch(mm)



### MAXIMUM RATINGS (TA=25°C UNLESS OTHERWISE NOTED)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Maximum RMS Voltage	$V_{RMS}$	21	V
Maximum DC Blocking Voltage	$V_{DC}$	30	V
Maximum Average Forward Rectified Current	$I_{FM}$	200	mA
Peak Forward Surge Current 8.3ms Single Half Sine Wave	$I_{FSM}$	600	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	125	°C
Storage Temperature Range	$T_{STG}$	-50~+125	°C

# DEVICE CHARACTERISTICS

## BAT54WS

### ELECTRICAL CHARACTERISTICS @ (TA=25°C UNLESS OTHERWISE NOTED)

Parameter	Test conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$I_R=100\mu A$	$V_R$	30	—	—	V
Forward Voltage	$I_F=0.1mA$	$V_F$	—	—	240	mV
	$I_F=1mA$		—	—	320	
	$I_F=10mA$		—	—	400	
	$I_F=30mA$		—	—	500	
	$I_F=100mA$		—	—	1000	
Reverse Leakage Current	$V_R=25V$	$I_R$	—	—	2.0	$\mu A$
Reverse Recovery Time	$I_F=10mA$ , $I_R=10mA$ to $1mA$ , $R_L=100\Omega$	$t_{rr}$	—	—	6.0	ns
Capacitance Between Terminals	$V_R=1V$ , $f=1MHz$	$C_T$	—	—	10	pF

### TYPICAL CHARACTERISTICS CURVES

FIG. 1-Forward Characteristics

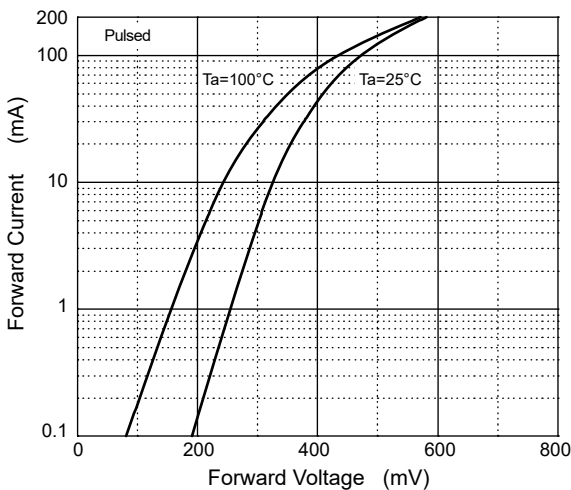


FIG. 2-Reverse Characteristics

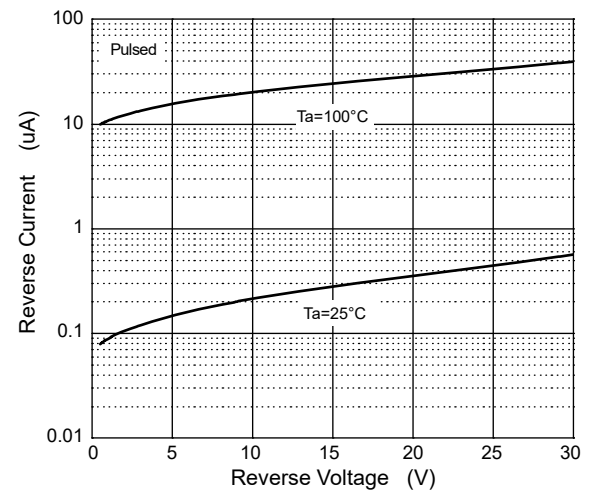


FIG. 3- Capacitance Characteristics

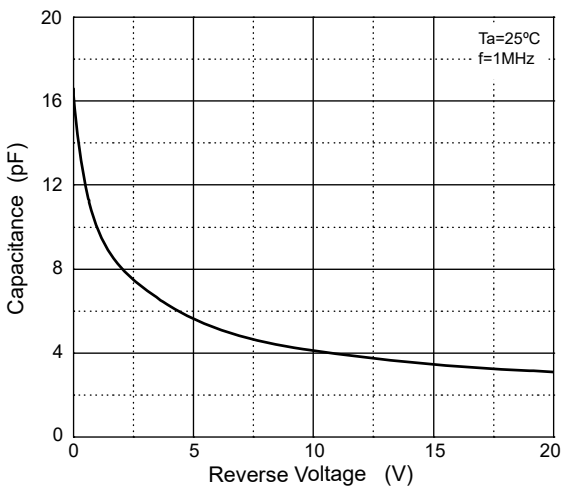


FIG. 4-Power Derating Curve

