

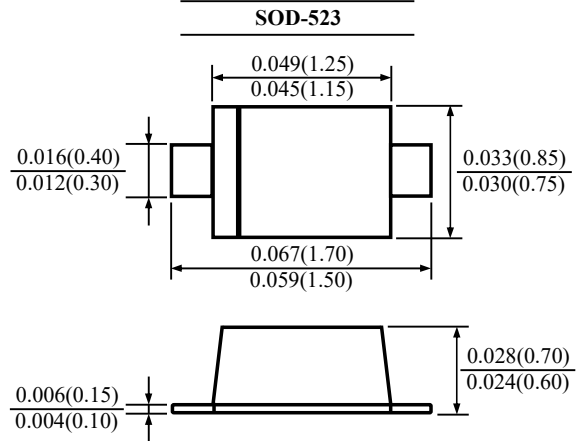


BAT54WTH

SCHOTTKY DIODES

FEATURES

- Low Forward Voltage Drop
- Suffix "H" indicates Halogen-free parts, ex. BAT54WTH



Dimensions in inch and (millimeter)

Maximum Ratings@ $T_A=25\text{ }^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Forward Current	I_F	200	mA
Peak Forward Surge Current at $t_p=10\text{ms}$	I_{FSM}	600	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	K/W
Operating Junction Temperature	T_J	+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +125	$^\circ\text{C}$

Electrical Characteristics@ $T_A=25\text{ }^\circ\text{C}$

Parameter	Conditions	Symbol	Min.	Max.	Unit
Forward Voltage	$I_F=0.1\text{mA}$	V_F	--	0.24	V
	$I_F=1\text{mA}$			0.32	
	$I_F=10\text{mA}$			0.40	
	$I_F=30\text{mA}$			0.50	
	$I_F=100\text{mA}$			0.80	
Reverse Leakage Current	$V_R=25\text{V}$	I_R	--	2	μA
Reverse Recovery Time	$I_F=I_R=10\text{mA}$, $R_L=100\Omega$ $V_R=6\text{V}$	t_{rr}	--	6	ns
Capacitance	$V_R=1.0\text{V}$, $f=1.0\text{MHz}$	C	--	10	pF



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Typical Characteristics

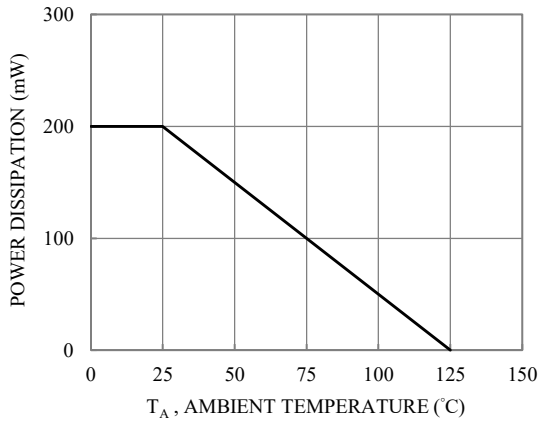


Fig.1-POWER DERATING CURVE

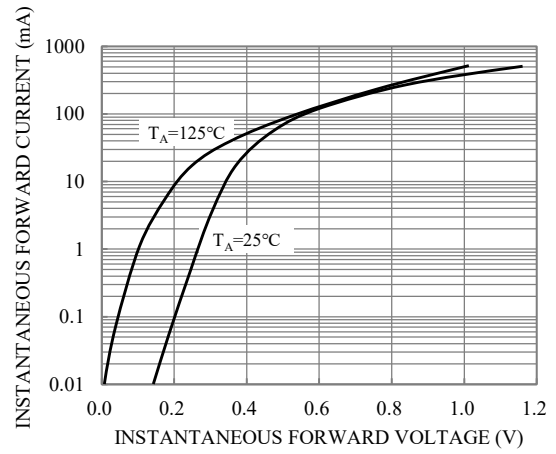


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

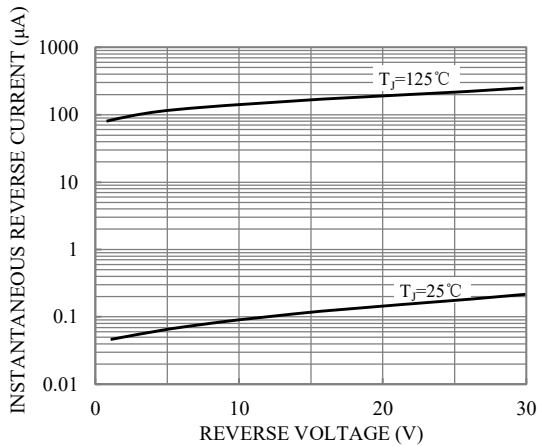


Fig.3-TYPICAL REVERSE CHARACTERISTICS

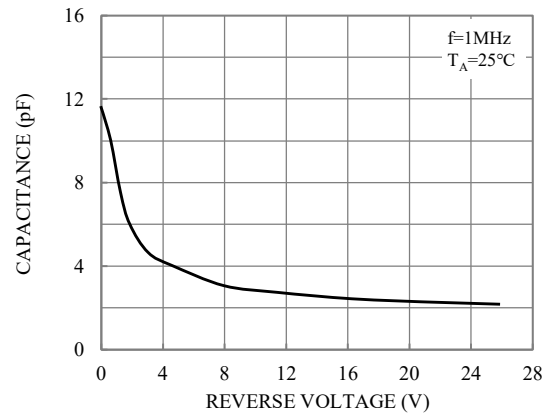
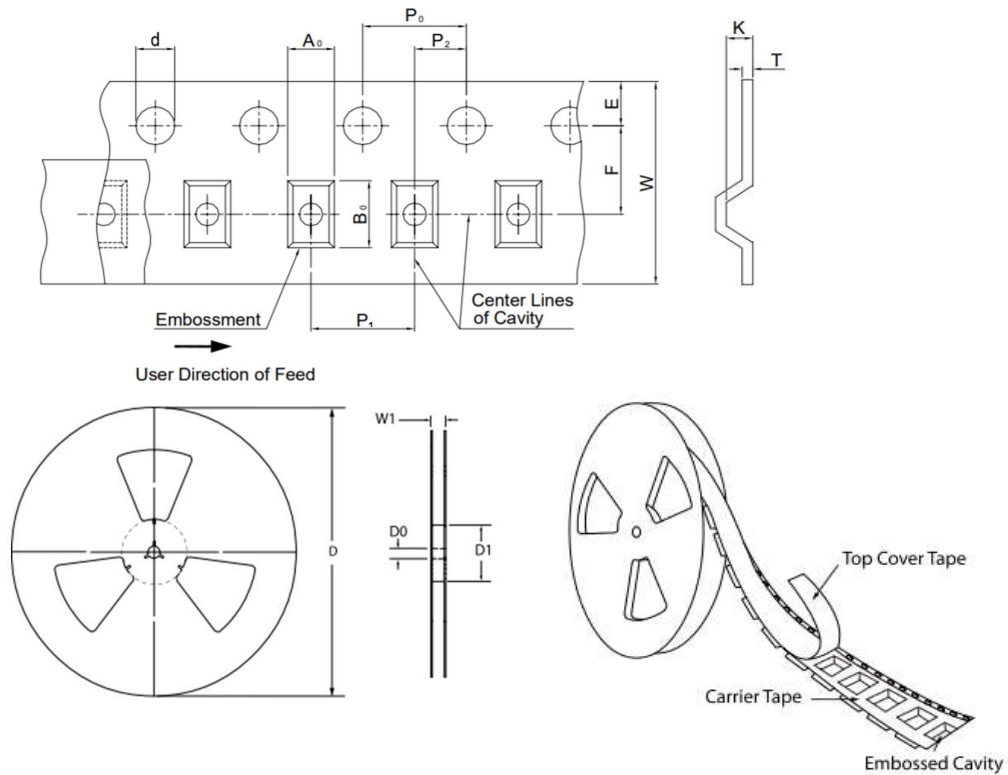


Fig.4-TOTAL CAPACITANCE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-523
Carrier width	A ₀	0.85 ± 0.15
Carrier length	B ₀	1.65 ± 0.15
Carrier depth	K ₀	2.40 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	13.00 ± 0.50
Reel inner diameter	D ₁	MIN. 50.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	MAX. 0.60
Tape width	W	MAX. 8.30
Reel width	W ₁	MAX. 14.90

ORDER INFORMATION

Package	Reel Size	Quantity
SOD-523	7"	4,000

MARKING CODE

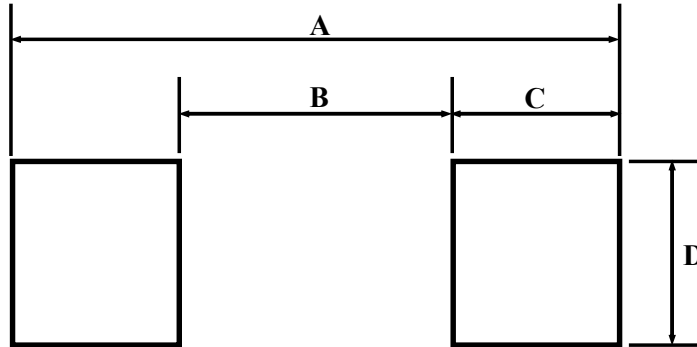
Part Number	Marking Code
BAT54WTH	3



BAT54WTH

SCHOTTKY DIODES

SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-523	1.70	0.70	0.50	0.80