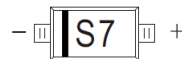


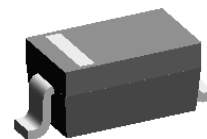
PRIMARY CHARACTERISTICS	
P _D	200mV
V _{RRM}	30V
I _F	200mA
V _F @I _F =200mA	1.0V
T _J Max	125°C

SOD-323 PACKAGE

BAT42WS MARKING: S7



BAT43WS MARKING: S8



FEATURES

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automatic Insertion
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, SOD-123
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

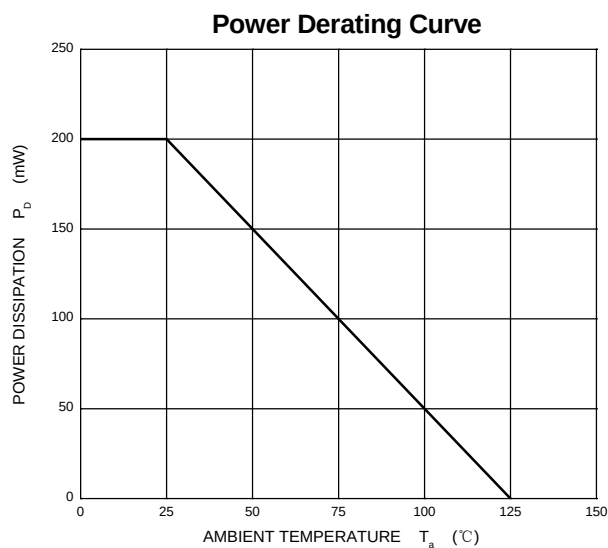
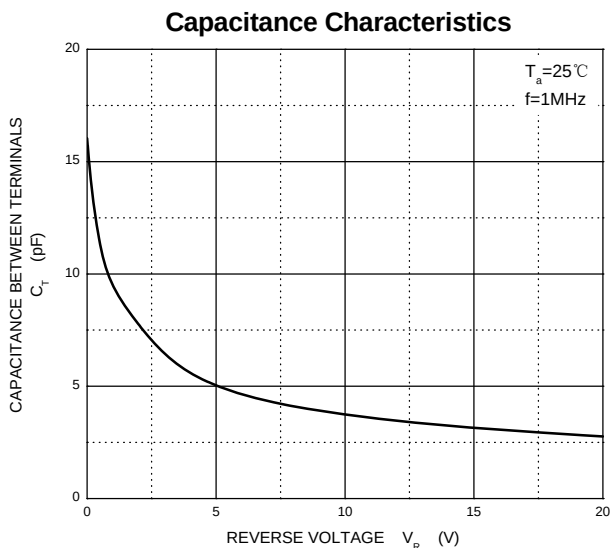
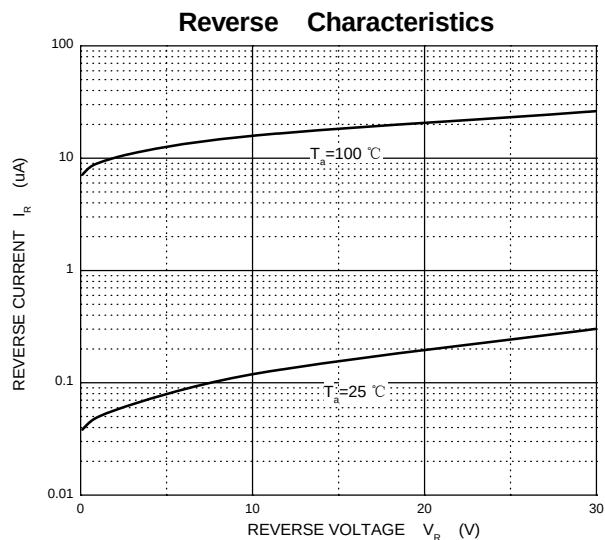
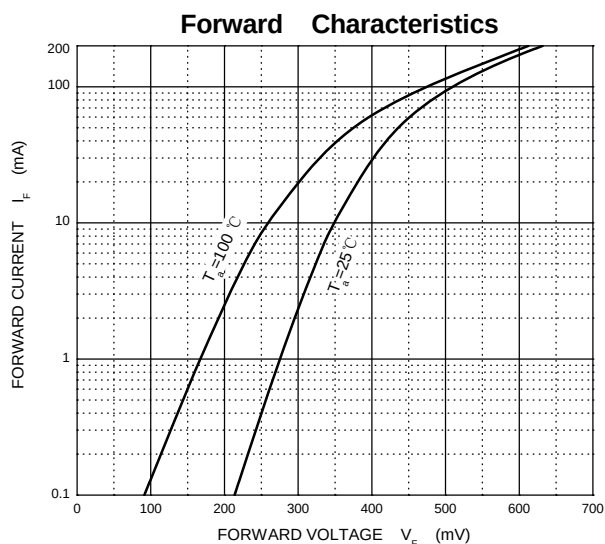
Parameter	Symbol	BAT42WS/BAT43WS	Unit
Peak Repetitive Peak reverse voltage	V _{RRM}	30	V
Working Peak	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	21	V
Forward Continuous Current	I _{FM}	200	mA
Repetitive Peak Forward Current @t<1.0s	I _{FRM}	500	mA
Peak forward surge current @<10ms	I _{FSM}	4.0	A
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	500	/W
Storage temperature	T _{STG}	-55~+125	°C
Operating Temperature	T _J	-55~+125	°C



Electrical Ratings @T_A=25°C

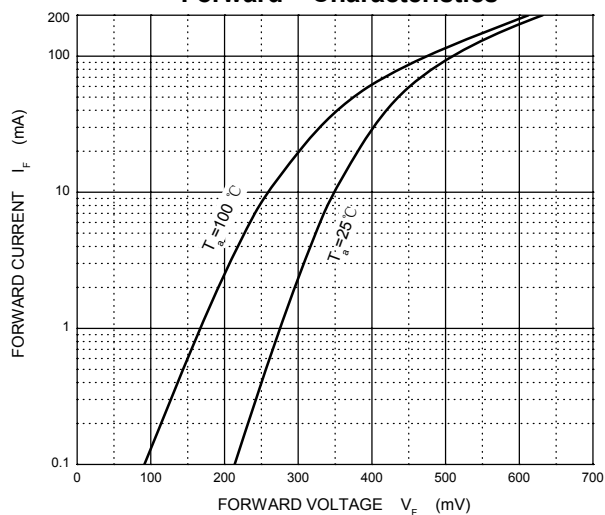
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	30			V	I _R =10μA
Forward voltage	V _F			1.0	V	I _F =200mA
				0.4	V	I _F =10mA
				0.65	V	I _F =50mA
		0.26		0.33	V	I _F =2mA
				0.45	V	I _F =15mA
Reverse current	I _R			0.5	μA	V _R =25V
Capacitance between terminals	C _T			10	pF	V _R =1.0V,f=1.0MHz
Reverse Recovery Time	t _{rr}			5	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics BAT42WS

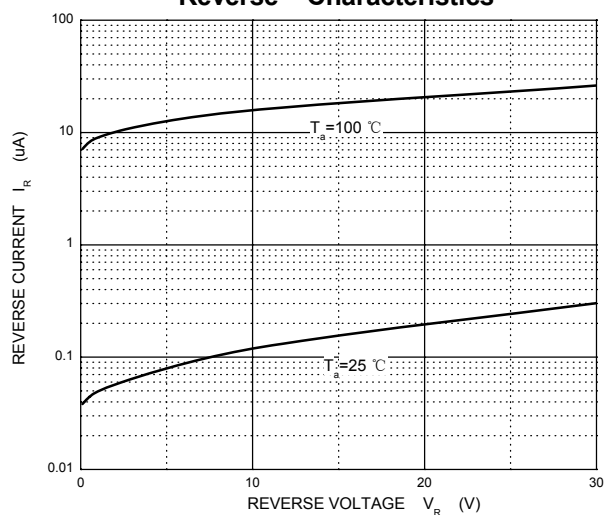


Typical Characteristics BAT43WS

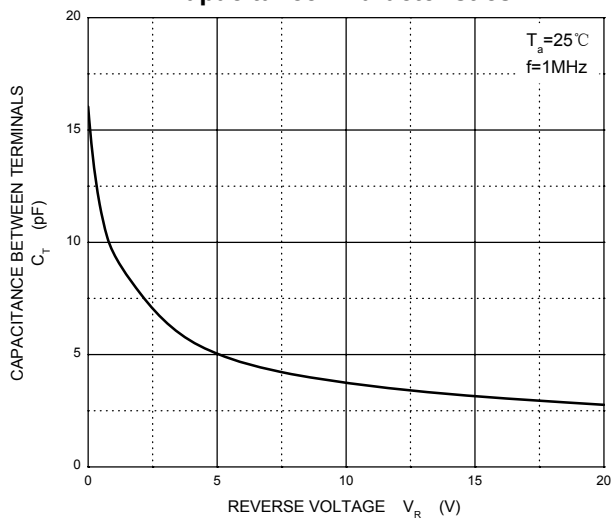
Forward Characteristics



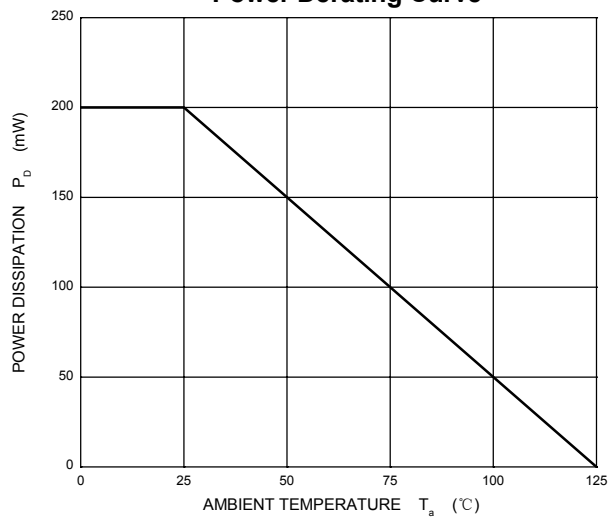
Reverse Characteristics



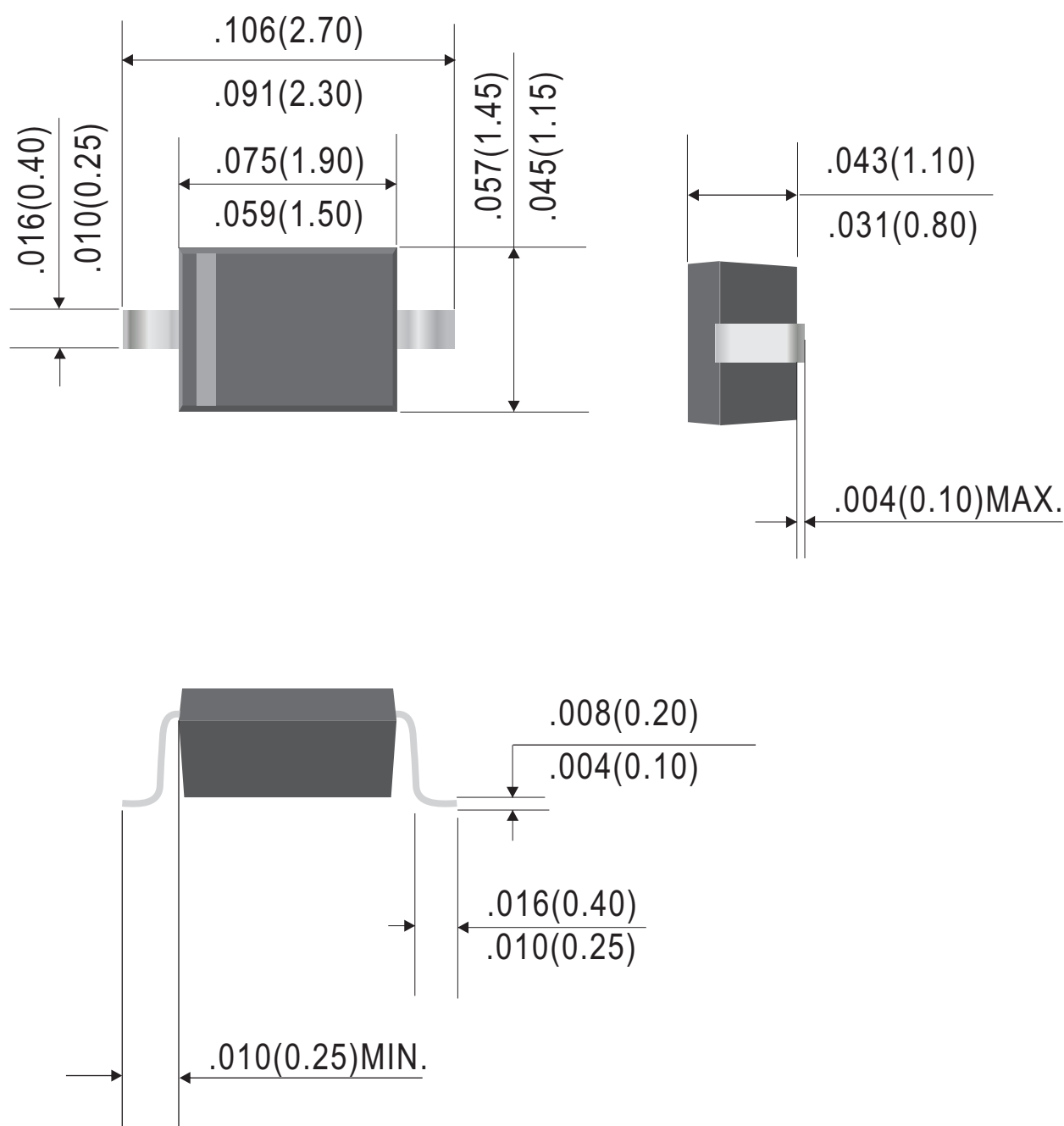
Capacitance Characteristics



Power Derating Curve



SOD-323



Dimensions in inches and (millimeters)

Rev.C

Suggested Soldering Pad Layout	SOD-323
The diagram shows two yellow rectangular soldering pads. The dimensions are as follows: - Pad width: $.027(0.70)$ inches - Pad height: $.033(0.83)$ inches - Distance between pad centers: $.057(1.45)$ inches	
Dimensions in inches and (millimeters)	

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

Disclaimer

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.