BAT42W~BAT43W

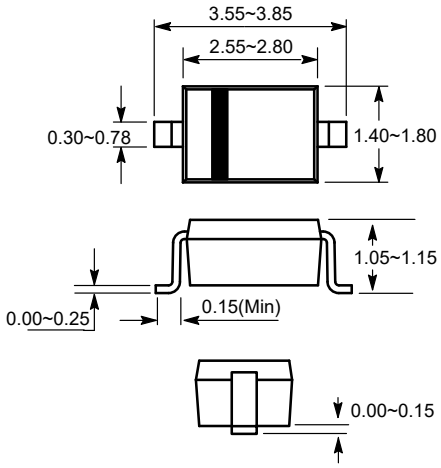
SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt **CURRENT** 0.2 Ampere

FEATURES

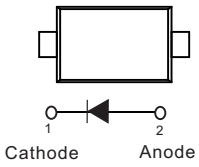
- Fast Switching Speed
- Low Forward Voltage Drop
- Lead free in compliance with EU RoHS

SOD-123 Unit:mm



MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS(T_A = 25°C unless otherwise noted)

Parameter	Symbol	BAT42W	BAT43W	Unit
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30		V
RMS Reverse Voltage	$V_{R(RMS)}$	21		V
Forward Continuous Current	I_{FM}	200		mA
Average Rectified Output Current	I_O	100		mA
Non-repetitive Peak Surge Current @t<10ms	I_{FSM}	4.0		A
Repetitive Peak Forward Surge Current @ t<1.0s	I_{FRM}	500		mA
Power Dissipation	P_D	200		mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625		℃/W
Operation/Storage Temp. Range	T_j, T_{STG}	-55~+125		℃

ELECTRICAL CHARACTERISTICS(T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Leakage	I_R	(V_R = 25 V) (V_R = 25 V;T_J=100°C)			0.5 100	μA
Forward Voltage BAT42WS BAT43WS	V_F	(I_F = 200mA) (I_F = 10mA) (I_F = 50mA) (I_F = 2.0mA) (I_F = 15mA)	 0.26		1.0 0.40 0.65 0.33 0.45	V V
Reverse Recovery Time	t_{rr}	(I_F =I_R=10mA, Irr =0.1I_R)			5	ns
Total Capacitance	C_T	(V_R = 0 V, f = 1.0 MHz)			120	pF

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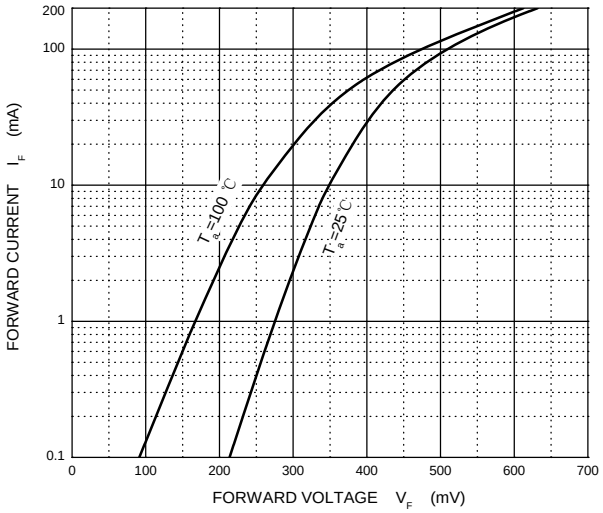
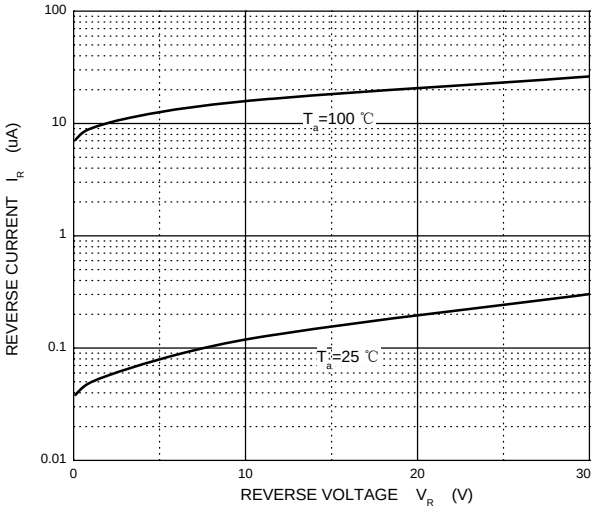
Typical Characteristics

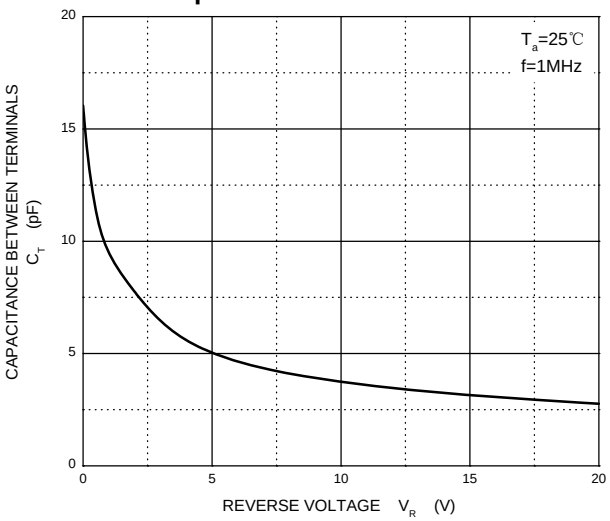
Forward Characteristics



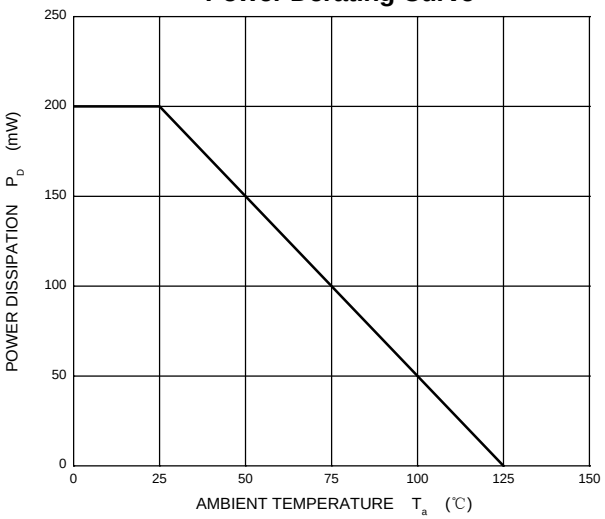
Reverse haracteristics



Capacitance Characteristics



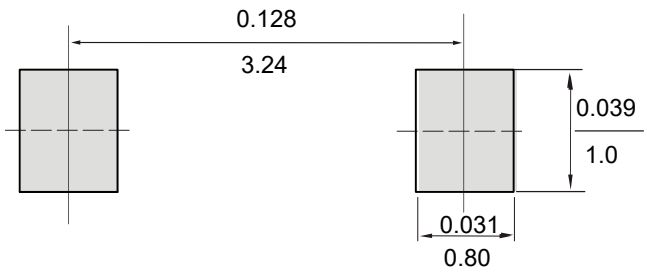
Power Derating Curve



MOUNTING PAD LAYOUT

SOD-123

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAT42W~BAT43W	SOD-123	7 Inch	3000