

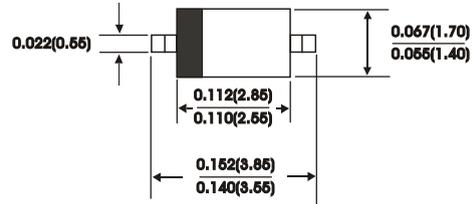


SCHOTTKY DIODES

FEATURES:

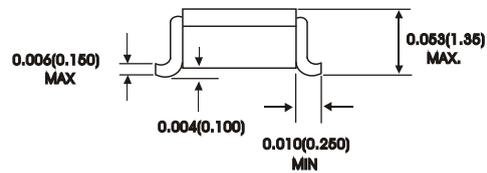
- Low Forward Voltage drop
- Fast general purpose applications
- These diodes feature very low turn-on voltage and swtting. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- These diodes are also available in the DO-35 case with the type designation BAT42 to BAT43

SOD-123



MECHANICAL DATA

Case : SOD-123 Glass case
 Polarity : Cathode band
 Leads : Solderable per MIL-STD-202, Method 208
 Weight : 0.13 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60 Hz resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	BAT42W	BAT43W	Units
Maximum recurrent peak reverse voltage	V_{RRM}	30	30	Volts
Forward continuous current at $T_a=25^\circ C$	I_F	0.2 ¹⁾		Amps
Surge forward current at $t_p < 10ms, T_{amb} = 25^\circ C$	I_{FSM}	4 ¹⁾		Amps
Power dissipation at $T_{amb} = 25^\circ C$	P_{tot}	200 ¹⁾		mW
Minimum Reverse breakdown tested at $I_{BR} = 100\mu A$	$V_{(BR)R}$	30		Volts
Maximum instantaneous forward voltage Both Typts $I_F = 200mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 2mA$ $I_F = 15mA$	V_F	0.40 0.65	1.0 0.33 0.45	Volts
Maximum leakage current at $V_R = 25V$ $T_a = 25^\circ C$ $T_a = 100^\circ C$	I_R	0.5 100		μA
Total capacitance at $V_R = 1V, f = 1MHz$	C_{tot}	7		P_F
Maximum reverse recovery time from $I_F = I_R = 0.01A, I_{RR} = 1mA, R_L = 100$	T_{RR}	5.0		nS
Ambient operating temperature range	T_{amb}	-65to+125		$^\circ C$
Storage temperature range	T_{stg}	-65to+150		$^\circ C$

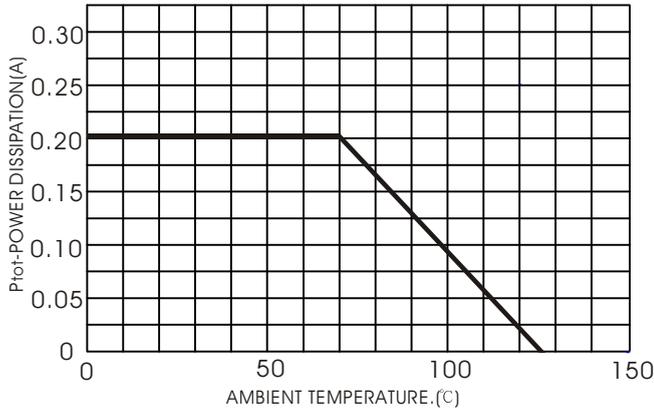
NOTES:

(1) Valid provided that leads at a distance of 4mm from the case are kept at ambient temperature



RATINGS AND CHARACTERISTIC CURVES

FIG. 1-ADMISSIBLE POWER DISSIPATION



IF-INSTANTANEOUS FORWARD VOLTAGE.(mA)

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

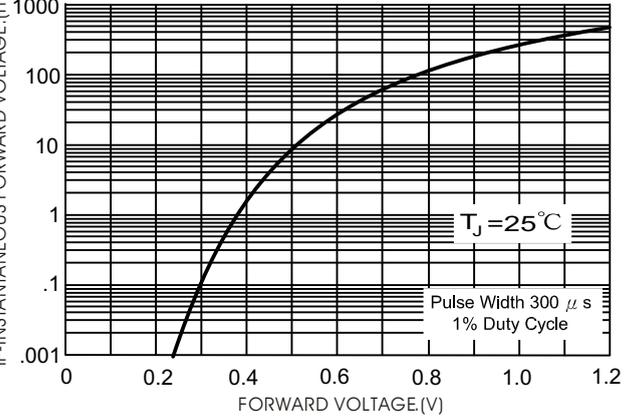


FIG. 3-TYPICAL REVERSE CHARACTERISTIC

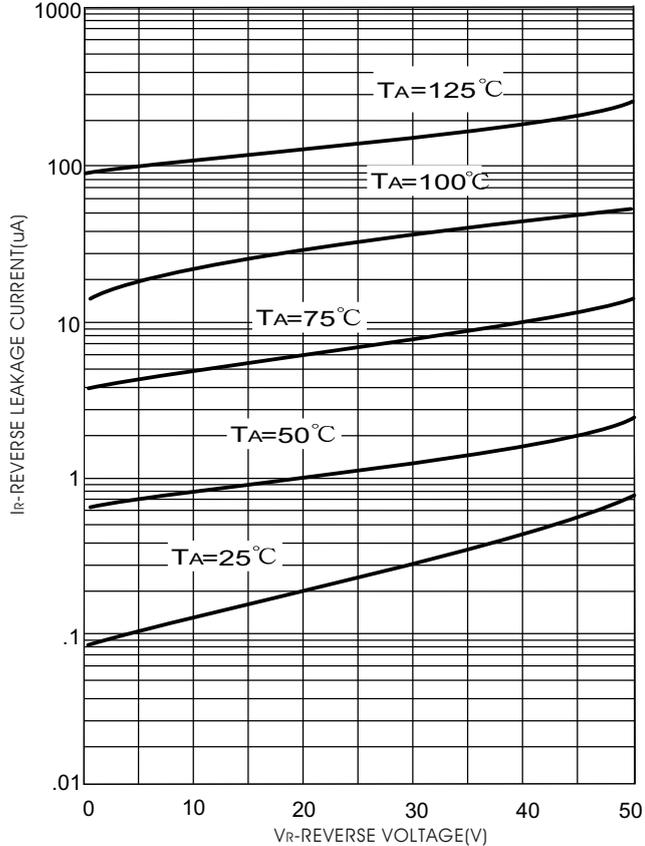
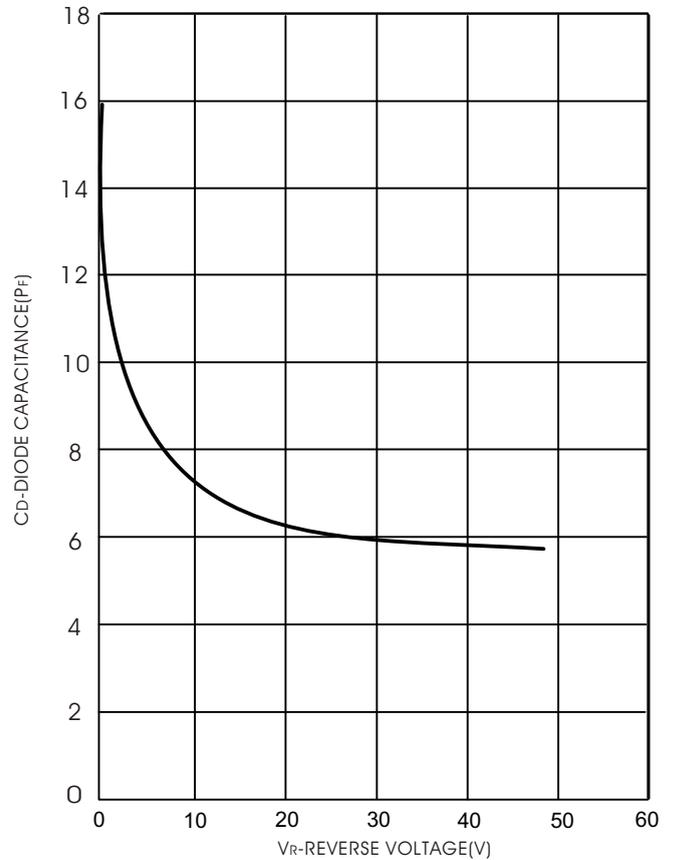


FIG. 4-TYPICAL CAPACITANCE





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