

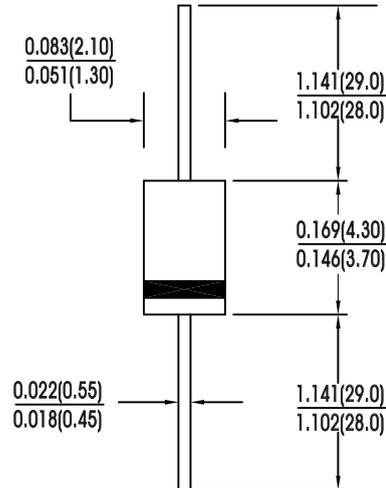


SCHOTTKY DIODES

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 SOD-123 case with the type designation BAT42W to BAT43W

DO-35



MECHANICAL DATA

Case : DO-35 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	BAT42	BAT43	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 $V_R=25V$	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		°C
Storage temperature range	T_{stg}	-65to+150		°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

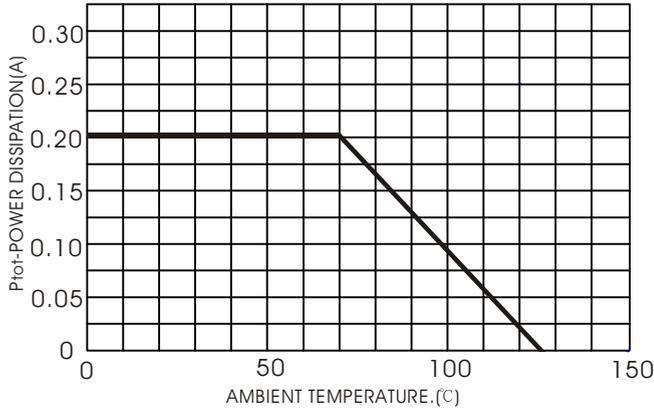


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

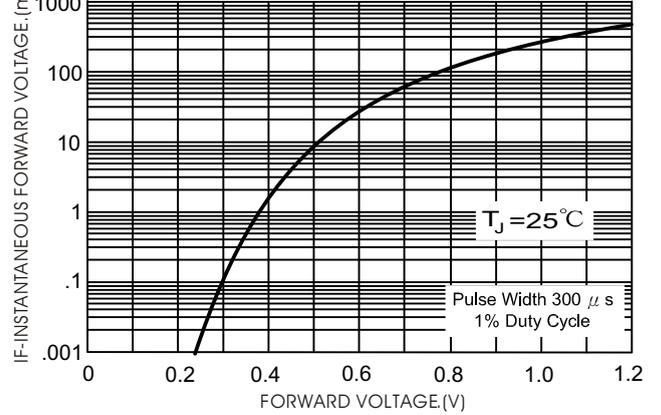


FIG. 3-TYPICAL REVERSE CHARACTERISTIC

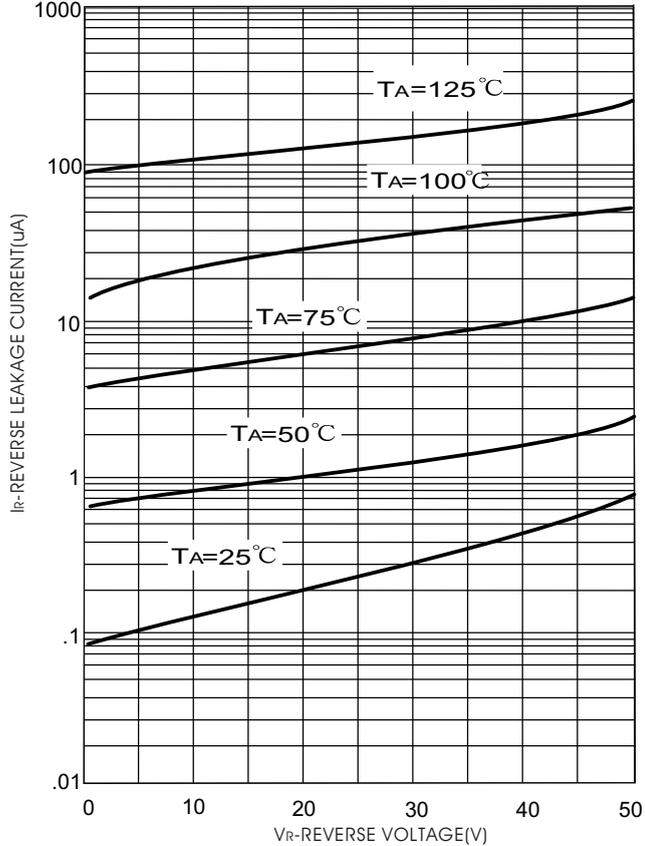
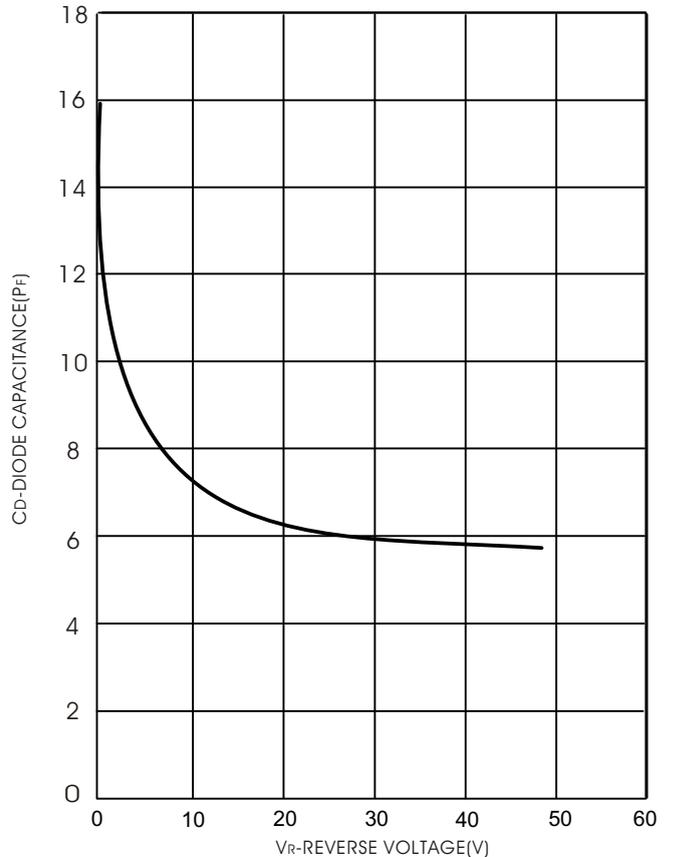


FIG. 4-TYPICAL CAPACITANCE





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