BAS15

HIGH SPEED SWITCHING DIODE

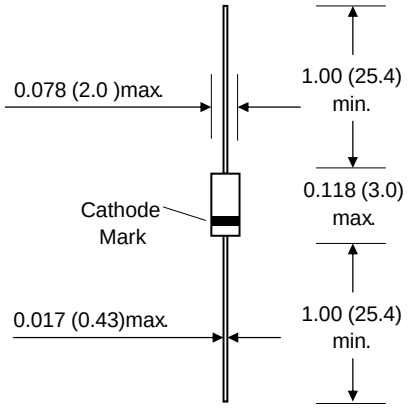
FEATURES :

- High switching speed: max. 4 ns
- Continuous reverse voltage:max. 50 V
- Repetitive peak reverse voltage:max. 50 V
- Repetitive peak forward current:max. 225 mA.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-34 Glass Case
Weight: approx. 0.11g

DO - 34 Glass



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	V
Maximum Continuous Reverse Voltage	V_{RM}	50	V
Maximum Continuous Forward Current , Ta = 150 °C	I_F	100	mA
Maximum Repetitive Peak Forward Current	I_{FRM}	225	mA
Maximum Power Dissipation	P_D	350	mW
Maximum Non-repetitive Peak Forward Current at t < 1s, Tj = 25 °C	I_{FSM}	0.5	A
Maximum Junction Temperature	T_J	200	°C
Storage Temperature Range	T_S	-65 to + 200	°C

Electrical Characteristics (Tj = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Current	I_R	V_R = 50 V	-	-	200	nA
		V_R = 50 V , Tj = 150 °C	-	-	100	µA
Forward Voltage	V_F	I_F = 100 mA	-	-	1.1	V
Diode Capacitance	Cd	f = 1MHz ; V_R = 0	-	-	2.0	pF
Reverse Recovery Time	Trr	I_F = 10 mA to I_R = 60mA R_L = 100 Ω ; Measured at I_R = 1 mA	-	-	4	ns

RATING AND CHARACTERISTIC CURVES (BAS15)

FIG. 1 MAXIMUM PERMISSIBLE CONTINUOUS FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE.

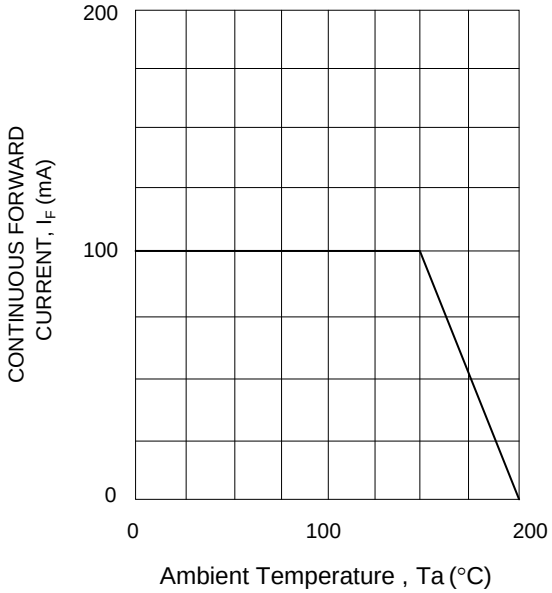


FIG. 2 TYPICAL FORWARD VOLTAGE

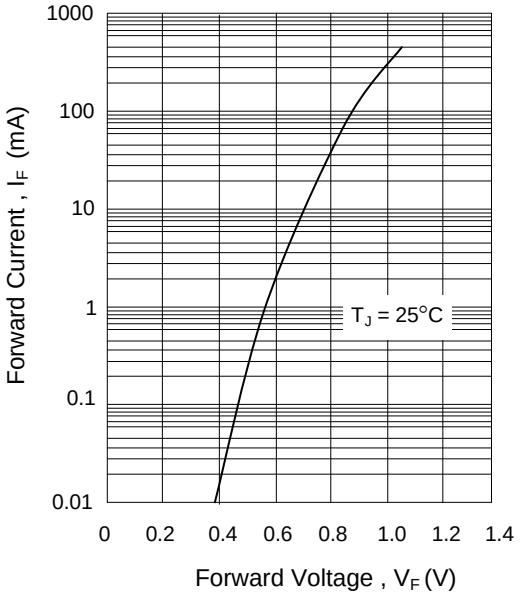


FIG. 3 TYPICAL DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE

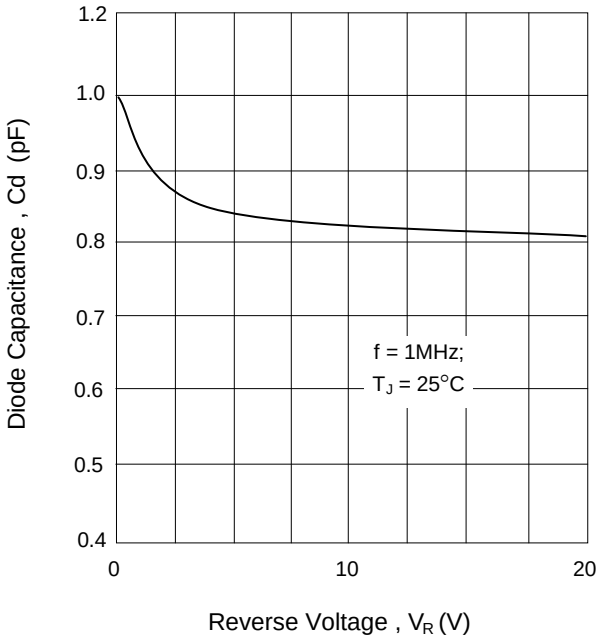


FIG. 4 TYPICAL REVERESE CURRENT VS JUNCTION TEMPERATURE