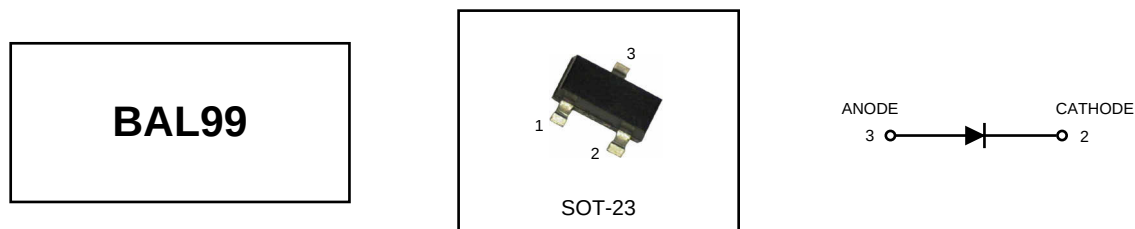


Switching Diode



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	VR	70	Vdc
Peak Forward Current	IF	100	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board ⁽¹⁾ TA=25°C Derate above 25°C	PD	225 1.8	mW mW / °C
Thermal Resistance, Junction to Ambient	RθJA	556	°C / W
Total Device Dissipation Alumina Substrate, ⁽²⁾ TA=25°C Derate above 25°C	PD	300 2.4	mW mW / °C
Thermal Resistance, Junction to Ambient	RθJA	417	°C / W
Junction and Storage Temperature	TJ,TSTG	-55 to +150	°C

DEVICE MARKING

BAL99=JF

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

Characteristic	Symbol	Min.	Max.	Unit
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OFF CHARACTERISTICS

Reverse Breakdown Voltage (IBR=100uAdc)		V(BR)	70	-	Vdc
Forward Voltage	(IF=1.0 mAdc)	VF	-	715	mVdc
	(IF=10 mAdc)		-	855	
	(IF=50 mAdc)		-	1000	
	(IF=150 mAdc)		-	1250	
Reverse Voltage Leakage Current	(VR=70 Vdc)	IR	-	2.5	uAdc
	(VR=25 Vdc, TJ=150°C)		-	30	
	(VR=70 Vdc, TJ=150°C)		-	50	
Recovery Current (IF=10 mAdc, VR=5.0 Vdc, RL=500 Ω)		QS	-	45	pC
Diode Capacitance (VR=0, f=1.0MHz)		CJ	-	1.5	pF
Reverse Recovery Time (IF=IR=10 mAdc, RL=100 Ω, measured at IR=1.0mAcc)		trr	-	6.0	nS
Forward Recovery Voltage (IF=10 mAdc, tr=20nS)		VFR	-	1.75	Vdc

(1) FR-5=1.0 x 0.75 x 0.062in.

(2) Alumina=0.4 x 0.3 x 0.024in. 99.5% alumina.

FIGURE 1. FORWARD VOLTAGE

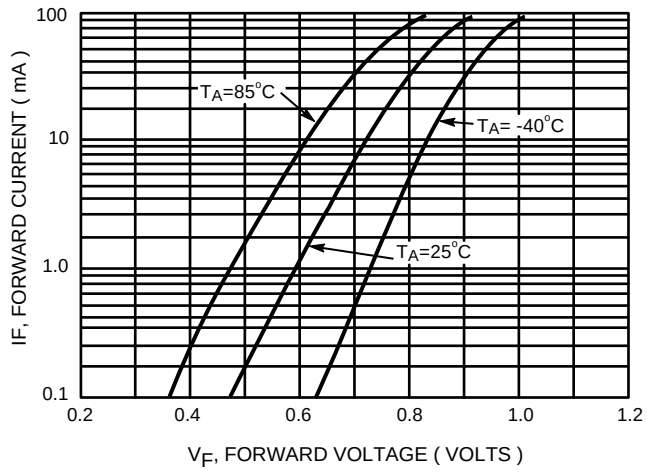


FIGURE 2. LEAKAGE CURRENT

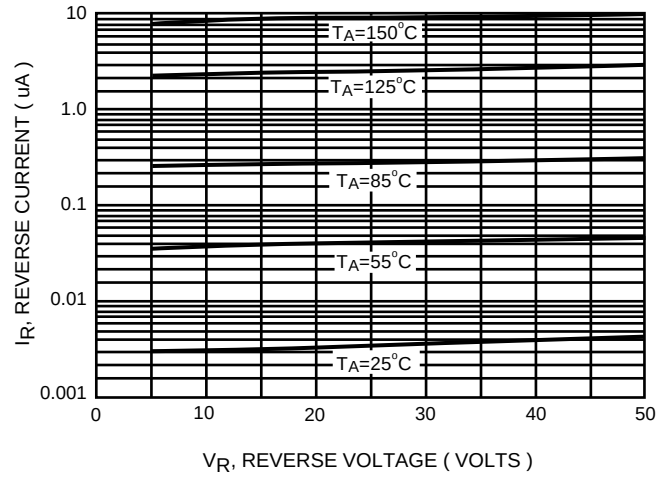


FIGURE 3. CAPACITANCE

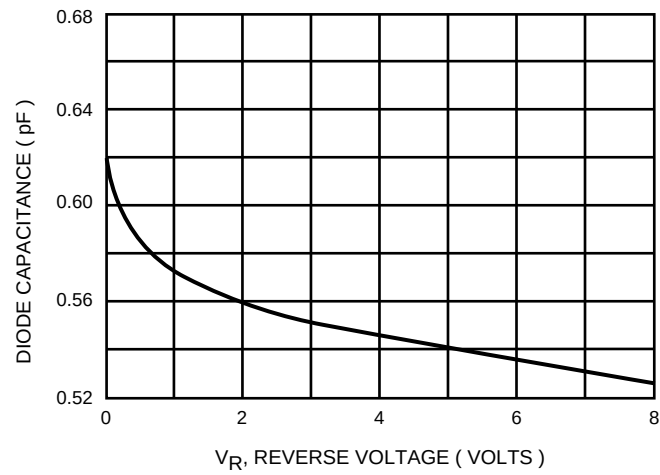


FIGURE 1. FORWARD VOLTAGE

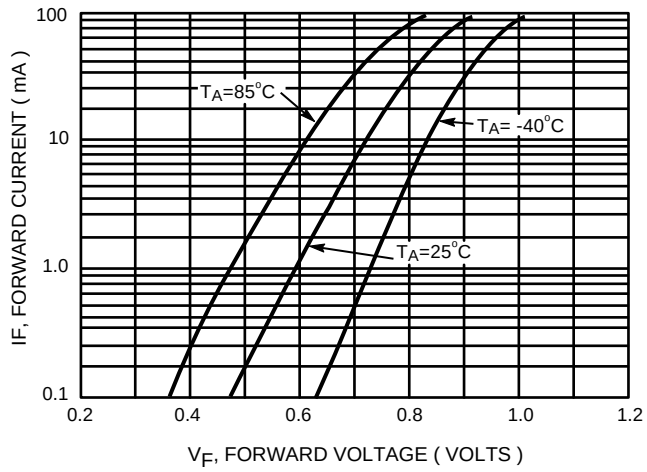


FIGURE 2. LEAKAGE CURRENT

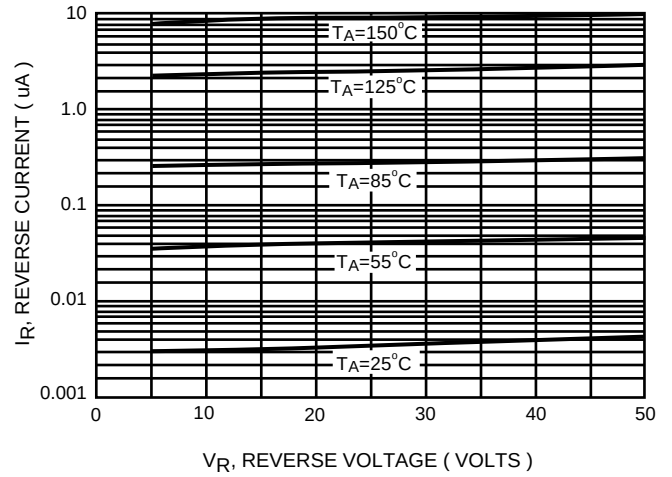


FIGURE 3. CAPACITANCE

