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Release Note for MICRORB-10035-MLP Lot No. N218181033

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Parts Tested

- MICRORB-10035-MLP Lot no. N218181033

APPLICATION NOTE

Test Summary

The following parameters are specific to the above-mentioned lot and differ from those specified in the product datasheet. All other performance parameters for this lot can be found in the product datasheet.

Table 1. Lot Specific Parameters

Parameter	Condition	Min	Typ	Max	Unit
Breakdown voltage (Vbr1)*	21°C	24.91	25.41	25.91	V
Overvoltage (Vov)			10	15	V

*Vbr1 is defined as the bias voltage at which dark current = 10 nA. (Measured at wafer level.)

Temperature Dependence of Breakdown Voltage

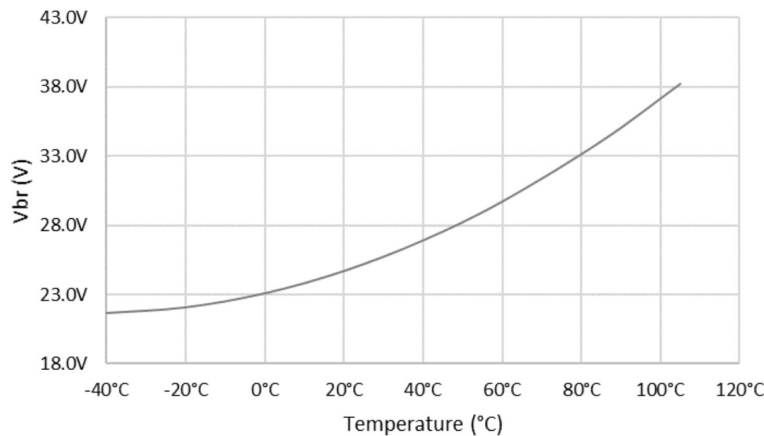


Figure 1. Temperature Dependence of Vbr2

The value of V_{br2}^\dagger as a function of temperature is plotted in Figure 1 and can be approximated by the equation:

$$V_{br2} = a \cdot T^2 + b \cdot T + c \quad (\text{eq. 1})$$


where T = temperature in °C and fit parameters are given in Table 2.

Table 2. Fit Parameters for Vbr2(T)

a	7.44E-04
b	6.53E-02
c	23.12

$\dagger V_{br2}$ is defined as the value of the 0 intercept of a straight line fit to a plot of \sqrt{I} vs V, where I is measured dark current and V is applied reverse bias voltage and the part is in Geiger mode. (Measured on packaged parts.)

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