



Small Signal Schottky Diode



FEATURES

- Integrated protection ring against static discharge
- Very low forward voltage
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

LINKS TO ADDITIONAL RESOURCES



APPLICATIONS

- Applications where a very low forward voltage is required

MECHANICAL DATA

Case: QuadroMELF (SOD-80)

Weight: approx. 34 mg

Cathode band color: black

Packaging codes/options:

GS18/10K per 13" reel (8 mm tape), 10K/box

GS08/2.5K per 7" reel (8 mm tape), 12.5K/box

PARTS TABLE

PART	TYPE DIFFERENTIATION	ORDERING CODE	CIRCUIT CONFIGURATION	REMARKS
BAS285	V _R = 30 V	BAS285-GS18 or BAS285-GS08	Single	Tape and reel

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V _R	30	V
Peak forward surge current	t _p = 10 ms	I _{FSM}	5	A
Repetitive peak forward current	t _p ≤ 1 s	I _{FRM}	300	mA
Forward current		I _F	200	mA
Average forward current		I _{FAV}	200	mA

THERMAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Junction to ambient air	On PC board 50 mm x 50 mm x 1.6 mm	R _{thJA}	320	K/W
Junction temperature		T _j	125	°C
Storage temperature range		T _{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I _F = 0.1 mA	V _F			240	mV
	I _F = 1 mA	V _F			320	mV
	I _F = 10 mA	V _F			400	mV
	I _F = 30 mA	V _F			500	mV
	I _F = 100 mA	V _F			800	mV
Reverse current	V _R = 25 V, t _p = 300 μs	I _R			2.3	μA
Diode capacitance	V _R = 1 V, f = 1 MHz	C _D			10	pF

TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

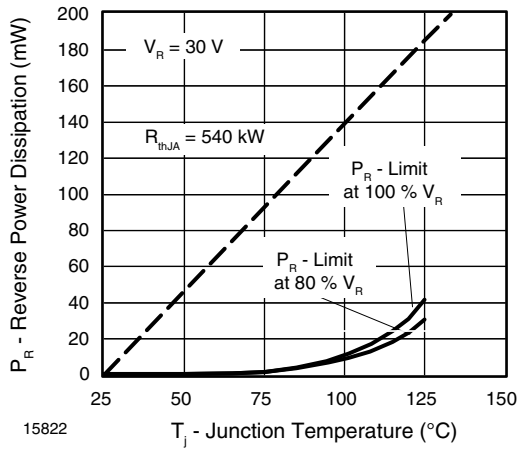


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

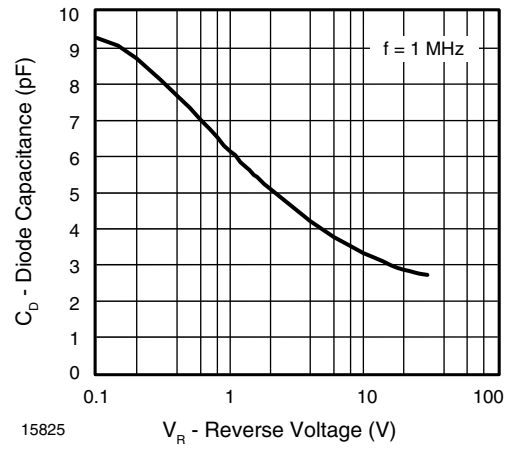


Fig. 4 - Diode Capacitance vs. Reverse Voltage

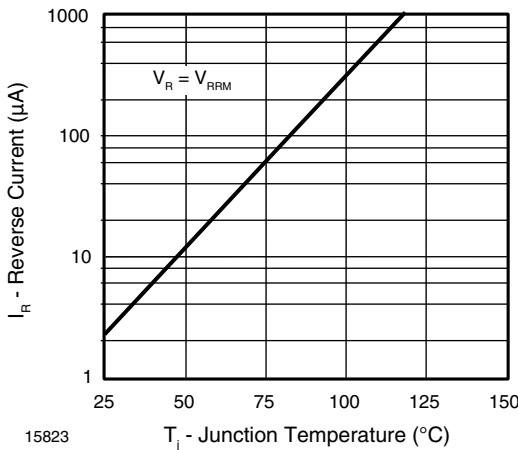


Fig. 2 - Reverse Current vs. Junction Temperature

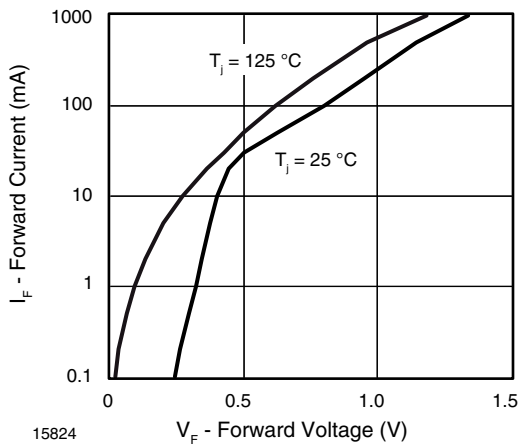
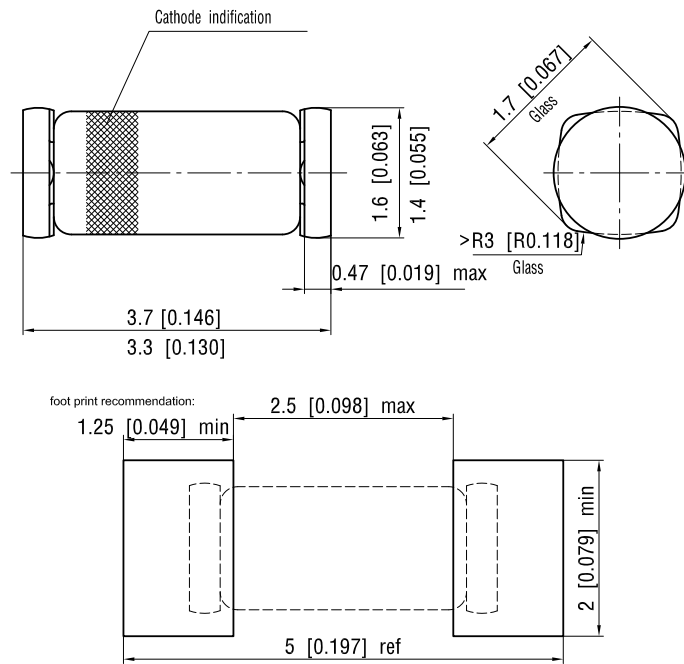


Fig. 3 - Forward Current vs. Forward Voltage

PACKAGE DIMENSIONS in millimeters (inches): **QuadroMELF (SOD-80)**



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