

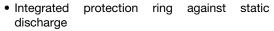
www.vishay.com

Vishay Semiconductors

Small Signal Schottky Diode



FEATURES





• Very low forward voltage

 Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



LINKS TO ADDITIONAL RESOURCES



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

APPLICATIONS

• Applications where a very low forward voltage is required

PARTS TABLE					
PART	ORDERING CODE	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS	
BAS286	BAS286-GS18 or BAS286-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	50	V	
Peak forward surge current	t _p = 10 ms	I _{FSM}	5	A	
Repetitive peak forward current	t _p ≤ 1 s	I _{FRM}	500	mA	
Forward continuous 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	
Thermal resistance junction to ambient air	On PC board 50 mm x 50 mm x 1.6 mm	R _{thJA}	320	K/W	
Junction temperature		Tj	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
	I _F = 0.1mA	V _F			300	mV
	I _F = 1 mA	V _F			380	mV
Forward voltage	I _F = 10 mA	V _F			450	mV
	I _F = 30 mA	V _F			600	mV
	I _F = 100 mA	V_{F}			900	mV
Reserve current	V _R = 40 V	I _R			5	μA
Diode capacitance	V _R = 1 V, f = 1 MHz	C _D			8	pF



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

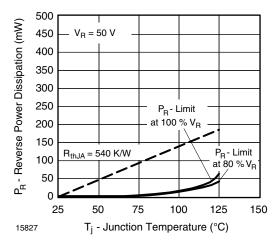


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

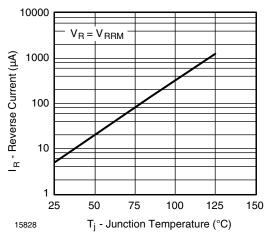


Fig. 2 - Reverse Current vs. Junction Temperature

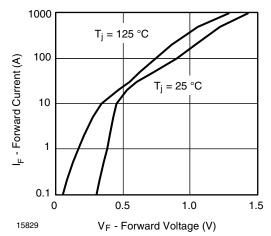


Fig. 3 - Forward Current vs. Forward Voltage

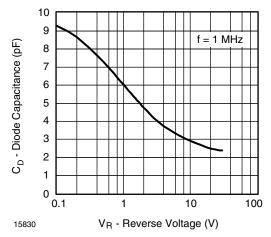
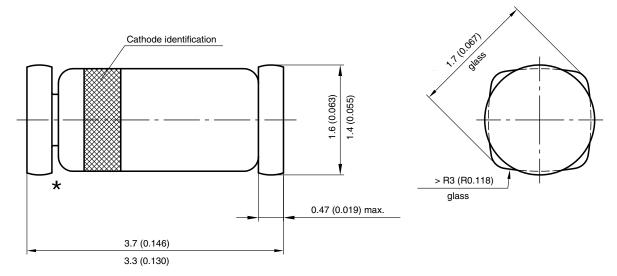


Fig. 4 - Diode Capacitance vs. Reverse Voltage

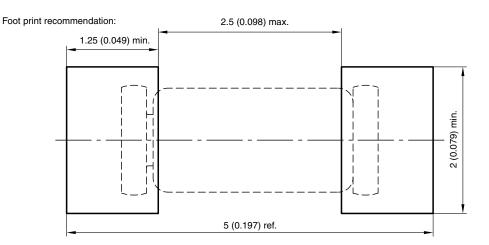


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PACKAGE DIMENSIONS in millimeters (inches): QuadroMELF (SOD-80)



★ The gap between plug and glass can be either on cathode or anode side



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