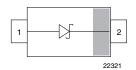
BAS581-02V



Vishay Semiconductors

Small Signal Schottky Diode





LINKS TO ADDITIONAL RESOURCES



MECHANICAL DATA

Case: SOD-523

Weight: approx. 1.4 mg

Molding compound flammability rating: UL 94 V-0

Terminals: high temperature soldering guaranteed: 260 °C/10 s at terminals

Packaging codes / options: 08/8K per 7" reel (8 mm tape) FEATURES

- This diode features very low turn-on voltage and fast switching
- AEC-Q101 qualified available
- Space saving SOD-523 package
- Base P/N-G3 RoHS-compliant, commercial grade
- Base P/N-HG3 RoHS-compliant, AEC-Q101 GREEN qualified (5-2008)
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

PARTS TABLE						
PART	ORDERING CODE	AEC-Q101 QUALIFIED	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS	
BAS581-02V	BAS581-02V-G3-08	no		.7	Tapa and real	
	BAS581-02V-HG3-08	yes	Single	.۲	Tape and reel	

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT		
Repetitive peak reserve voltage = working peak reserve voltage		V _{RRM}	40	V		
Forward continuous current		۱ _F	30	mA		
Surge forward current	t_p = 10 ms square wave, T_j = 25 °C prior to surge	I _{FSM}	200	mA		
Power dissipation	on FR-4 board with recommended soldering footprint	Pt _{ot}	150	mW		

THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL VALUE		UNIT		
Thermal resistance junction to ambient air	on FR-4 board according to JEDEC [®] 51-3 with recommended soldering footprint	R _{thJA}	680	K/W		
Thermal resistance junction to lead		R _{thJL}	480	K/W		
Junction temperature		Tj	125	°C		
Operating temperature range		T _{op}	-55 to +125	°C		
Storage temperature range		T _{stg}	-55 to +150	°C		

ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reserve breakdown voltage	I _R = 100 μA	V _(BR)	40			V
Leakage current	V _R = 30 V	I _R			0.5	μA
Forward voltage	I _F = 1 mA	VF			370	mV
Diode capacitance	$V_R = 1 V$, f = 1 MHz	CD			2	pF

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For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>



RoHS

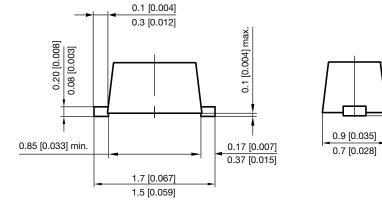
COMPLIANT HALOGEN

FREE



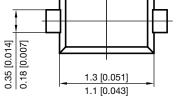


PACKAGE DIMENSIONS in millimeters [inches]: SOD-523



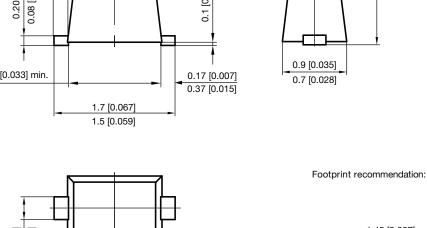


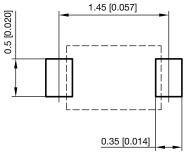
0.75 [0.029] 0.55 [0.021]



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