

BAS70ES

Surface Mount Schottky Diodes

Voltage

70 V

Current

0.2 A

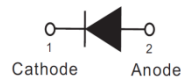
Features

- High switching speed
- Very low leakage current
- Low capacitance
- Surface mount package Ideally Suited for Automatic insertion
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-523 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0014 grams

SOD-523



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNIT
Reverse Voltage		V _R	70	V
Peak Reverse Voltage		V _{RM}	49	V
Maximum Average Forward Current		I _{F(AV)}	0.2	A
Non-repetitive Peak Forward Current	tp = 8.3 ms	I _{FSM}	0.1	A
Typical Junction Capacitance Measured at 1 MHz And Applied V _R = 0 V		C _J	2	pF
Typical Thermal Resistance ^(Note 1)		R _{θJA}	710	°C/W
Operating Junction Temperature Range		T _J	-55~150	°C
Storage Temperature Range		T _{STG}	-55~150	°C

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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 1\text{ mA}, T_J = 25^\circ\text{C}$	-	0.35	0.41	V
		$I_F = 10\text{ mA}, T_J = 25^\circ\text{C}$	-	0.65	0.75	V
		$I_F = 15\text{ mA}, T_J = 25^\circ\text{C}$	-	0.80	1	V
		$I_F = 1\text{ mA}, T_J = 125^\circ\text{C}$	-	0.25	-	V
		$I_F = 10\text{ mA}, T_J = 125^\circ\text{C}$	-	0.55	-	V
		$I_F = 15\text{ mA}, T_J = 125^\circ\text{C}$	-	0.59	-	V
Reverse Current	I_R	$V_R = 50\text{ V}, T_J = 25^\circ\text{C}$	-	-	0.1	μA
		$V_R = 70\text{ V}, T_J = 25^\circ\text{C}$	-	-	1	μA
		$V_R = 70\text{ V}, T_J = 25^\circ\text{C}$	-	45	-	μA
Reverse Recovery Time ^(Note 2)	T_{RR}	---	-	1.8	-	ns

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, standard pad.
2. Test Condition : $I_F=10\text{mA}$ to $I_R=10\text{mA}$, Recovery to 1mA , $R_L=100\Omega$.

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TYPICAL CHARACTERISTIC CURVES

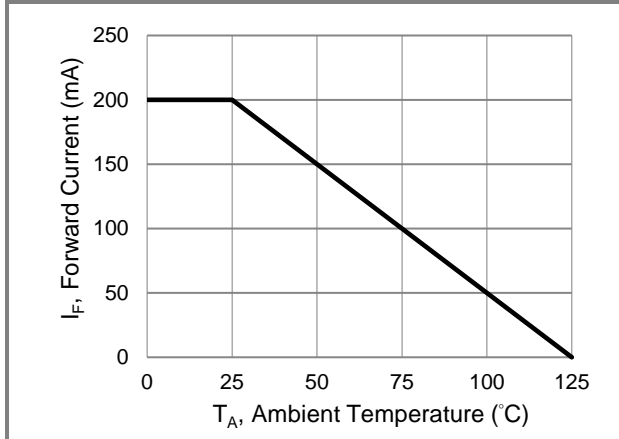


Fig.1 Power Derating Curve

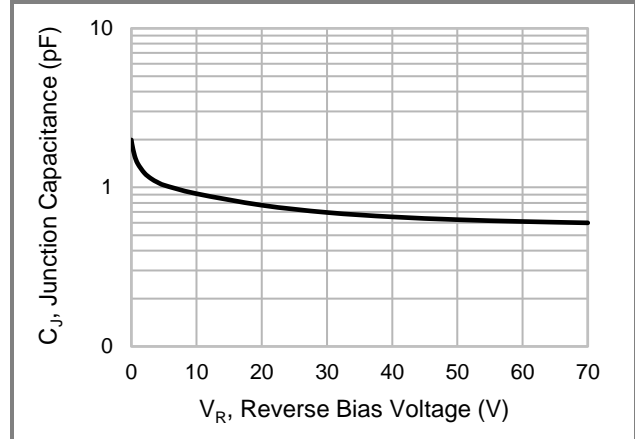


Fig.2 Typical Junction Capacitance

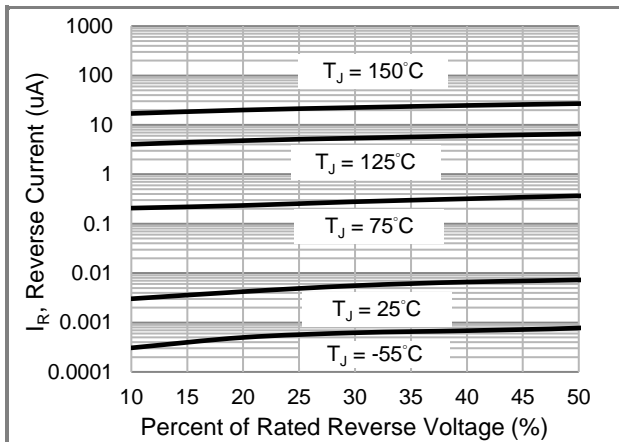


Fig.3 Typical Reverse Characteristics

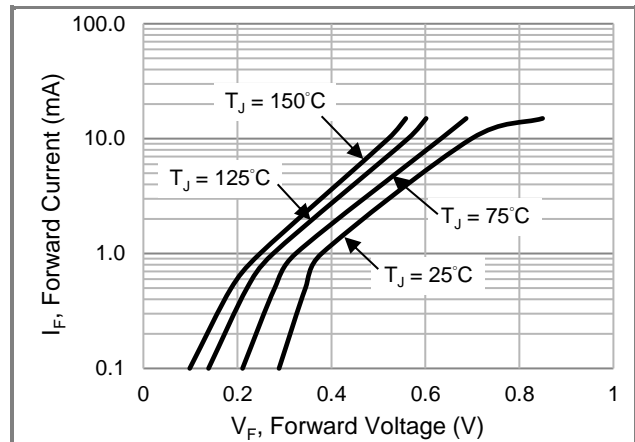


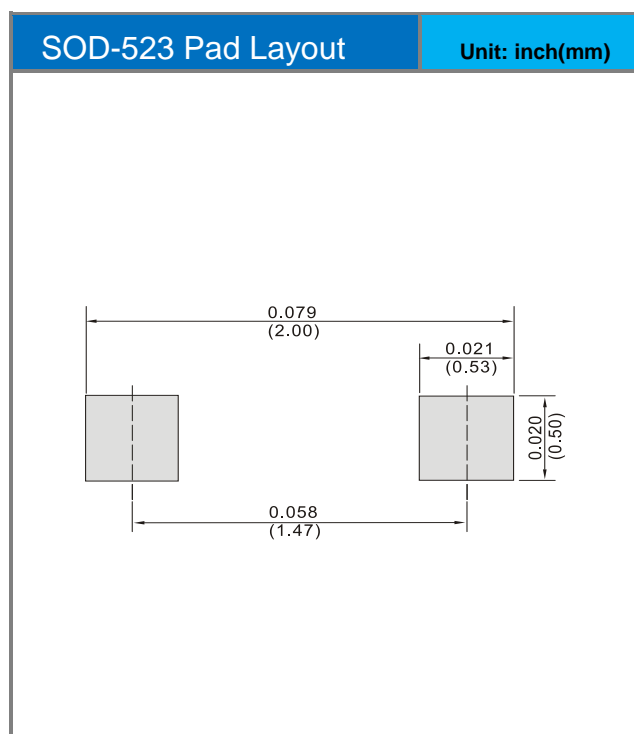
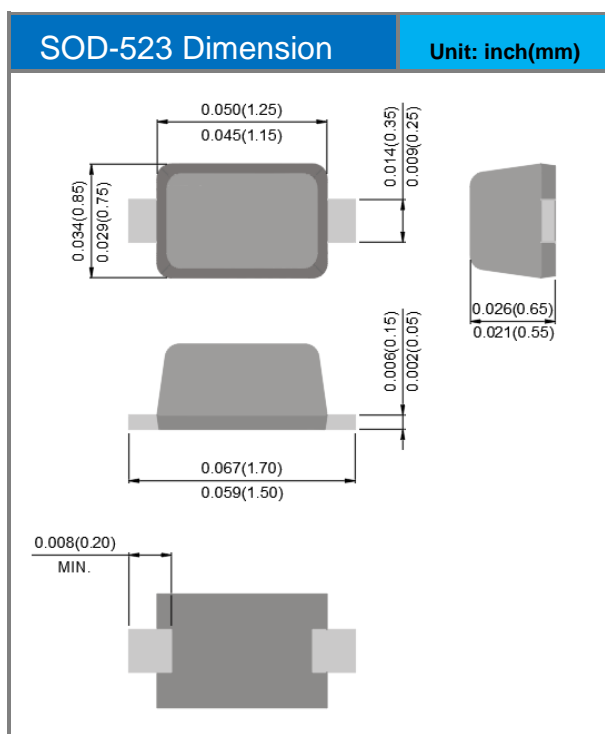
Fig.4 Typical Forward Characteristics

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAS70ES	SOD-523	5K pcs / 7" reel	AE

Packaging Information & Mounting Pad Layout



BAS70ES

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