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BAS70LP

SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Turn-on Voltage •
- Fast Switching
- Ultra-Small Surface Mount Package
- Lead Free/RoHS Compliant (Note 1)
- "Green" Device (Note 2)

Mechanical Data

- Case: DFN1006-2 •
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020 •
- Terminals: Finish NiPdAu annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 0.001 grams (approximate)

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DFN1006-2





Bottom View

Ordering Information (Note 3)

Part Number	Case	Packaging
BAS70LP-7B	DFN1006-2	10,000/Tape & Reel

Notes:

No purposefully added lead.
Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com.
For packaging details, go to our website at http://www.diodes.com.

Marking Information



73 = Product Type Marking Code Bar Denotes Cathode Side



Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	70	V
Forward Continuous Current (Note 4)	I _{FM}	70	mA
Non-Repetitive Peak Forward Surge Current @ tp < 1.0s	I _{FSM}	800	mA

Thermal Characteristics

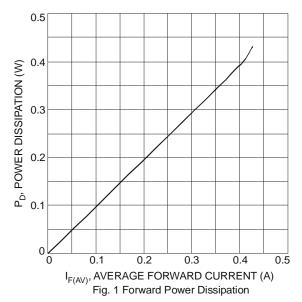
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 4)	PD	430	mW
Thermal Resistance Junction to Ambient Air (Note 4)	R _{0JA}	295	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

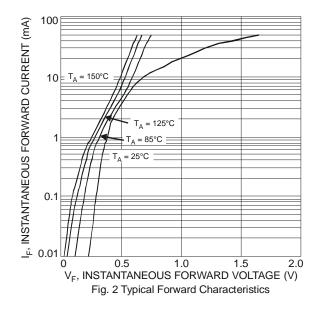
Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 5)	V _{(BR)R}	70	-	-	V	$I_R = 10 \mu A$
		-	-	0.42	V	I _F = 1.0mA, T _J = 25*C
Forward Voltage	VF	-	-	0.75		$I_F = 10mA, T_J = 25^*C$
		-	-	0.96		$I_F = 15mA, T_J = 25^*C$
Leakage Current (Note 5)	I _R	-	-	0.1		$V_R = 50V, T_J = 25*C$
		-	-	10		$V_R = 70V, T_J = 25*C$
Total Capacitance	CT	-	1	-	pF	$V_{R} = 0V, f = 1.0MHz$
Reverse Recovery Time	+	-	16	1.6 -		$I_F = I_R = 10mA$ to $IR = 1.0mA$,
	Lrr		1.0			$I_{rr} = 0.1 \text{ x } I_R, R_L = 100\Omega$

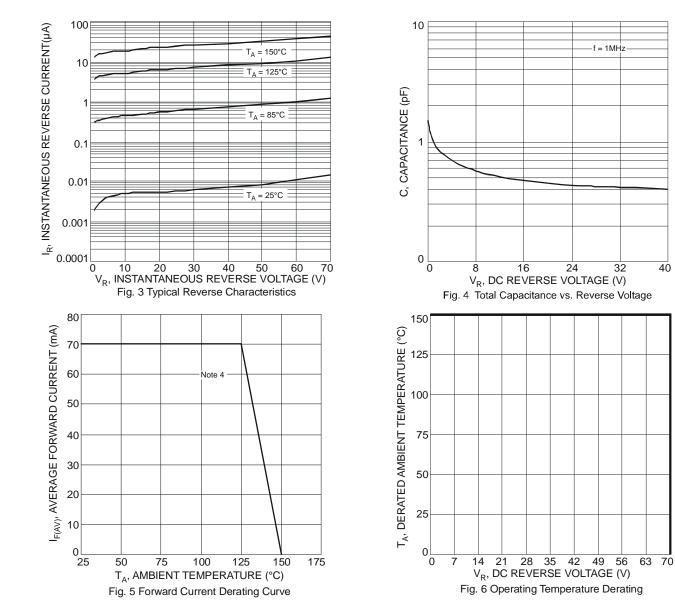
Notes:

Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com.
Short duration pulse test used to minimize self-heating effect.

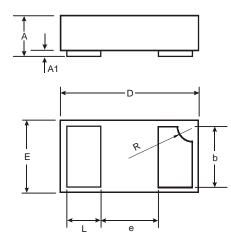








Package Outline Dimensions

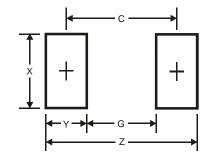


DFN1006-2					
Dim	Min	Max	Тур		
Α	0.47	0.53	0.50		
A1	0	0.05	0.03		
b	0.45	0.55	0.50		
D	0.95	1.075	1.00		
E	0.55	0.675	0.60		
е	-	-	0.40		
L	0.20	0.30	0.25		
R	0.05	0.15	0.10		
All Dimensions in mm					

NEW PRODUCT



Suggested Pad Layout



Dimensions	Value (in mm)
Z	1.1
G	0.3
Х	0.7
Y	0.4
С	0.7

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