

SB0530Q

Very Low V_F Schottky Rectifier

Voltage	30 V	Current	0.5 A
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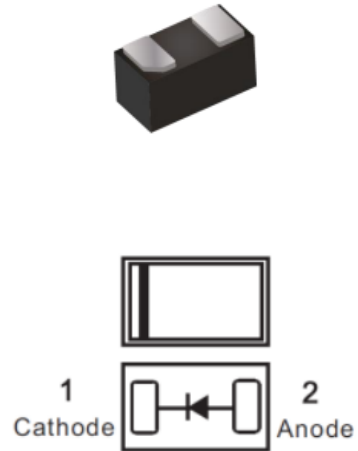
Features

- Very low forward voltage drop
- Fast switching speed
- 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 : DFN1006-2L Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0006 grams

DFN1006-2L



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

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	V
Maximum RMS Voltage	V _{RMS}	21	V
Maximum DC Blocking Voltage	V _{DC}	30	V
Maximum Average Forward Rectified Current	I _{F(AV)}	0.5	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	2	A
Typical Thermal Resistance	(Note 1) R _{θJC} (Note 2) R _{θJA}	200 430	°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°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V _F	I _F = 10 mA	-	0.31	0.36	V
		I _F = 100 mA	-	0.39	0.44	
		I _F = 0.5 A	-	0.50	0.55	
	V	V _F	I _F = 10 mA	-	0.17	-
			I _F = 100 mA	-	0.27	-
Reverse Current ^(Note 3)	I _R	V _R = 10V	-	0.3	10	uA
		V _R = 30V	-	2	20	
	mA	I _R	V _R = 10 V	-	0.3	-
			V _R = 30 V	-	1.1	-

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.
2. Mounted on a FR4 PCB, single-sided copper, standard footprint.
3. Short duration pulse test used to minimize self-heating effect.

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TYPICAL CHARACTERISTIC CURVES

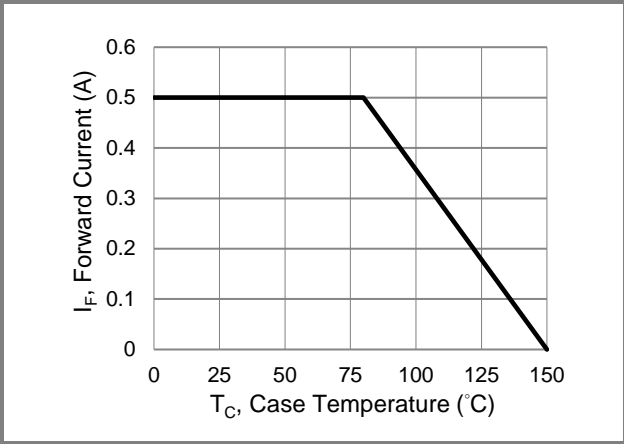


Fig.1 Forward Current Derating Curve

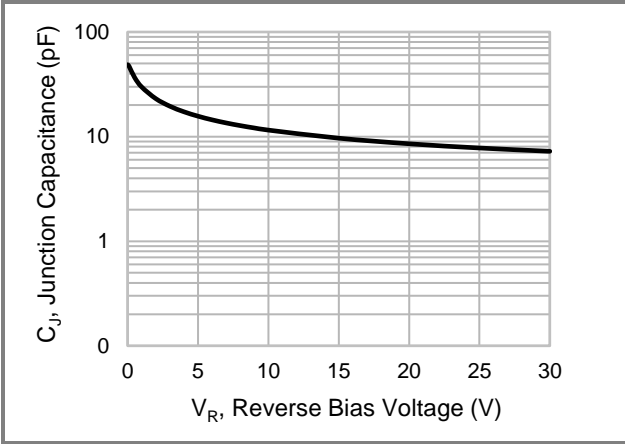


Fig.2 Typical Junction Capacitance

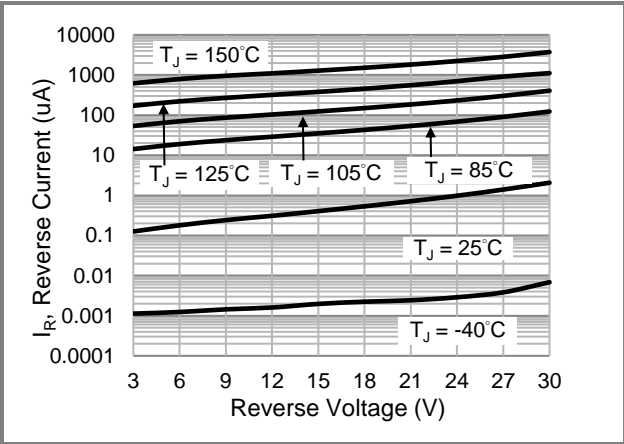


Fig.3 Typical Reverse Characteristics

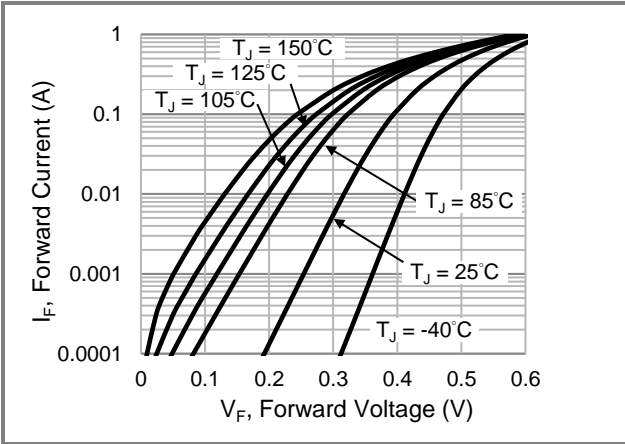


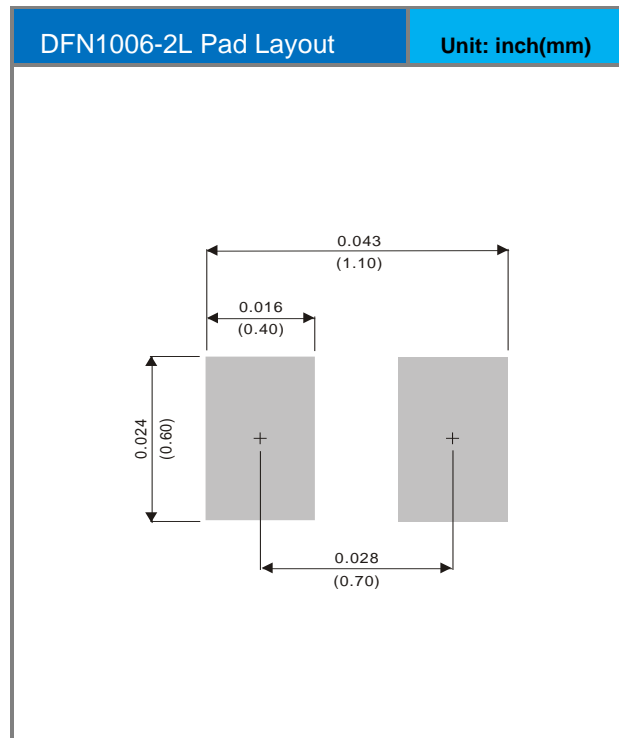
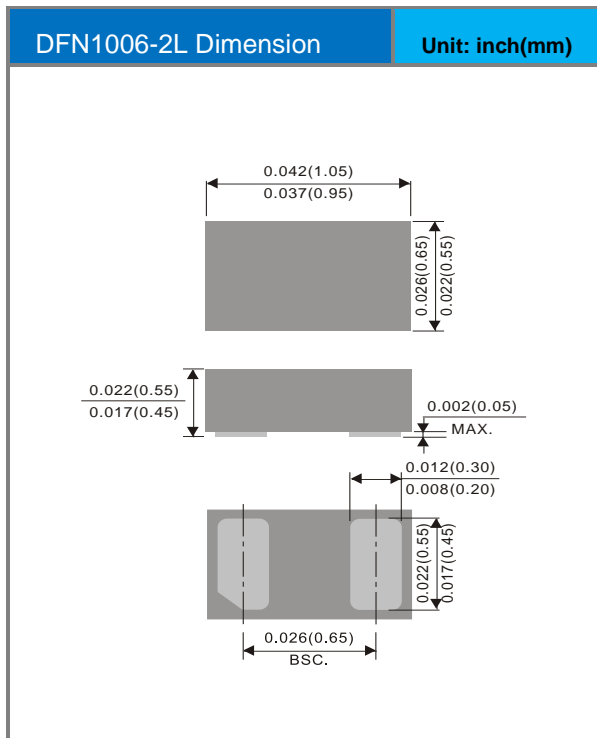
Fig.4 Typical Forward Characteristics

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SB0530Q	DFN1006-2L	10K pcs / 7" reel	YG

Packaging Information & Mounting Pad Layout



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