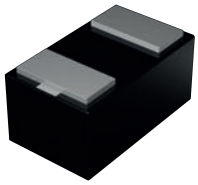
GOOD-ARK
SEMICONDUCTOR

BAS5711LP
Schottky Barrier Diode

Features

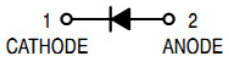
- Low turn-on voltage
- Fast switching
- Ultra-small surface mount package
- Lead free/RoHS compliant



Package: DFN1006-2

Mechanical Data

- Case material: molded plastic, "green" molding compound, compliant to UL flammability classification rating 94V-0
- Moisture sensitivity: level 1 per J-STD-020
- Terminal connections: cathode bar
- Terminals finish - NiPdAu annealed over copper lead frame solderable per MIL-STD-202, method 208
- Weight: 0.001 grams (approximately)



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse	V_{RRM}	70	V
Voltage Working Peak Reverse	V_{RWM}		
Voltage DC Blocking Voltage	V_R		
Forward Continuous Current[1]	I_{FM}	70	mA
Non-Repetitive Peak Forward Surge Current @ t<1.0s	I_{FSM}	800	mA
Power Dissipation[1]	P_D	430	mW
Thermal Resistance, Junction to Ambient Air[1]	$R_{\theta JA}$	295	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage[2]	$V_{(BR)R}$	I_R=10μA	70	-	-	V
Forward Voltage	V_F	I_F=1.0mA	-	-	400	mV
		I_F=15mA	-	-	960	
Reverse Leakage Current[2]	I_R	V_R=50V	-	-	0.04	uA
		V_R=70V	-	-	2	
Total Capacitance	C_T	V_R=0V, F=1.0MHz	-	2.0	-	pF
Reverse Recovery Time	T_{rr}	I_F=I_R=10mA, I_{rr}=0.1I_R	-	-	5.0	nS

Notes:
1. Device mounted on FR- 4 PC board with recommended pad layout
2. Short duration pulse test used to mini mize self-heating effect.

Electrical Characteristic Curves (T_A=25°C unless otherwise specified)

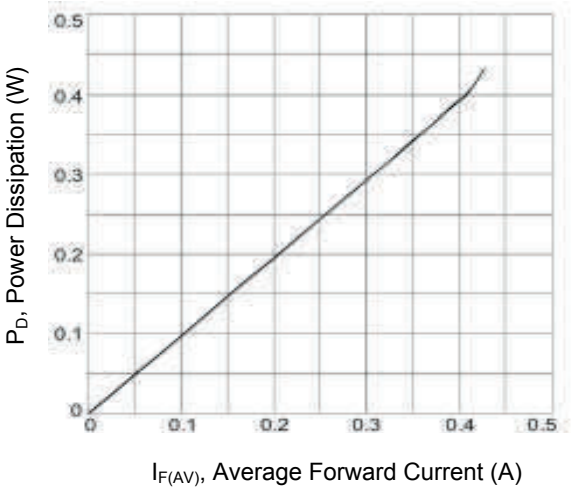


Figure 1. Forward Power Dissipation

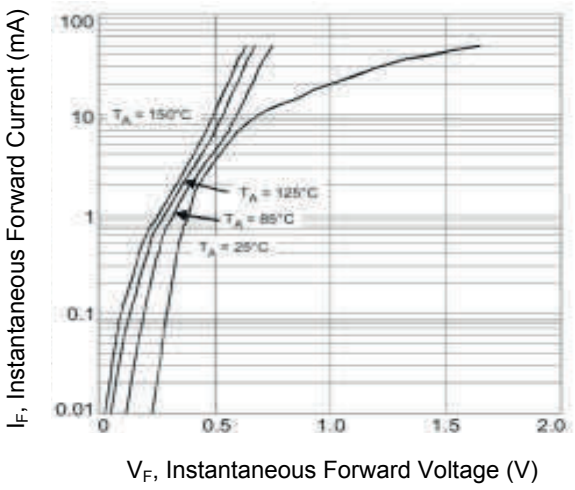


Figure 2. Typical Forward Characteristics

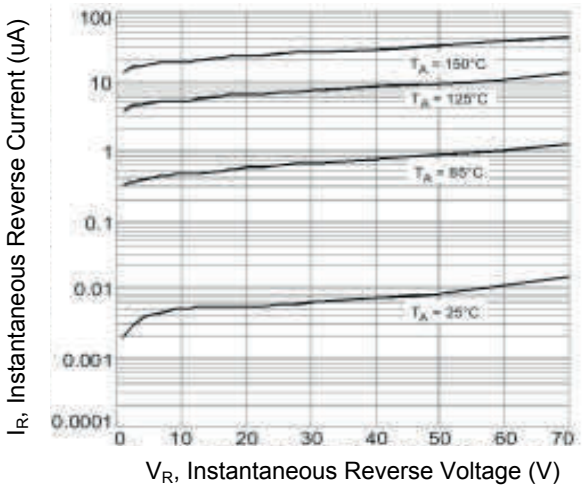


Figure 3. Typical Reverse Characteristics

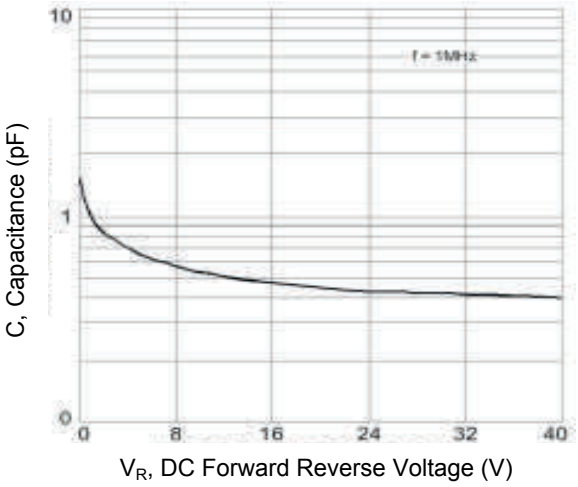


Figure 4. Total Characteristics VS. Reverse Voltage

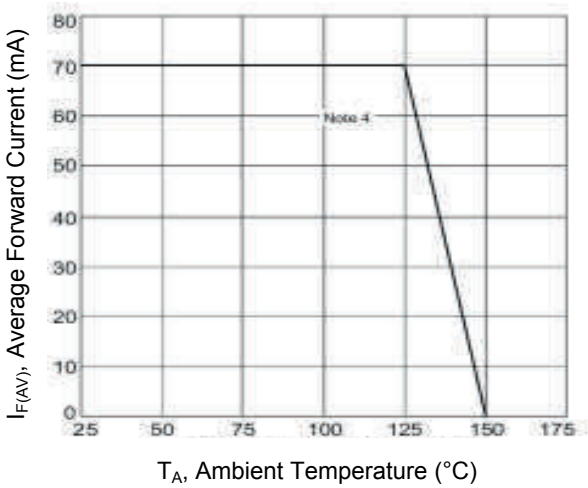


Figure 5. Forward Current Derating Curve

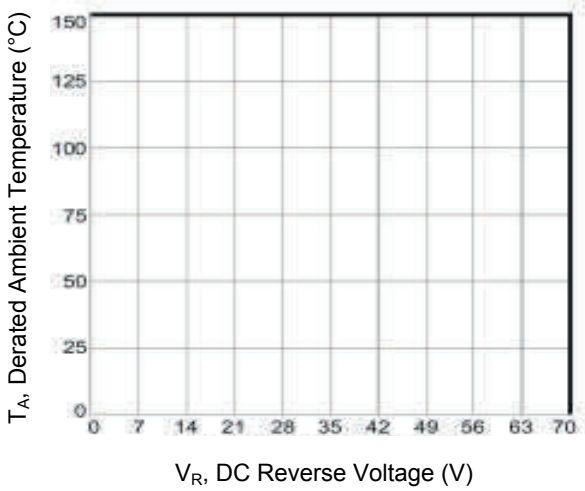
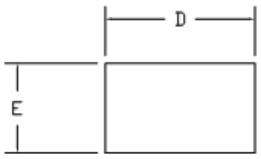
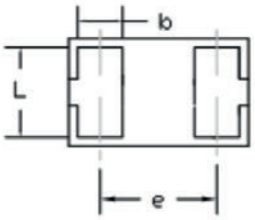


Figure 6. Operating Temperature Derating

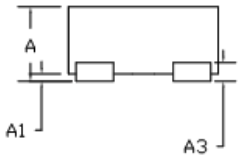
Package Outline Dimensions (DFN1006-2)



TOP VIEW



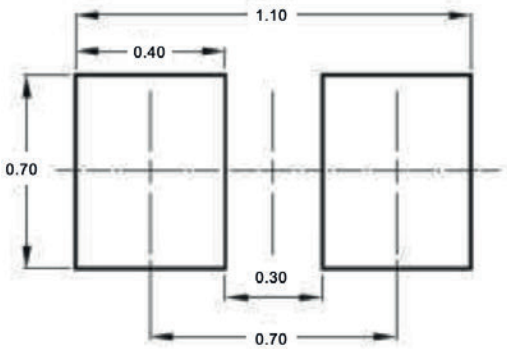
BOTTOM VIEW



SIDE VIEW

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.40	0.50	0.016	0.020
A1	0.00	0.05	0.000	0.002
A3	0.125 REF		0.005 REF	
D	0.95	1.05	0.037	0.041
E	0.55	0.65	0.022	0.026
b	0.20	0.30	0.008	0.012
L	0.45	0.55	0.018	0.022
e	0.65 BSC		0.026 BSC	

Recommended Pad Layout



Unit: mm