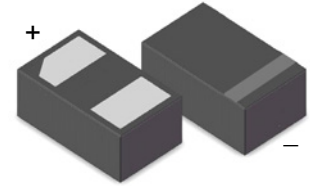


## Features

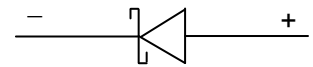
- Forward current (I<sub>o</sub>=100mA)
- Low reverse current
- Low forward voltage drop
- Leadless ultra small SMD plastic package



DFN0603

## Applications

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications



Schematic Diagram

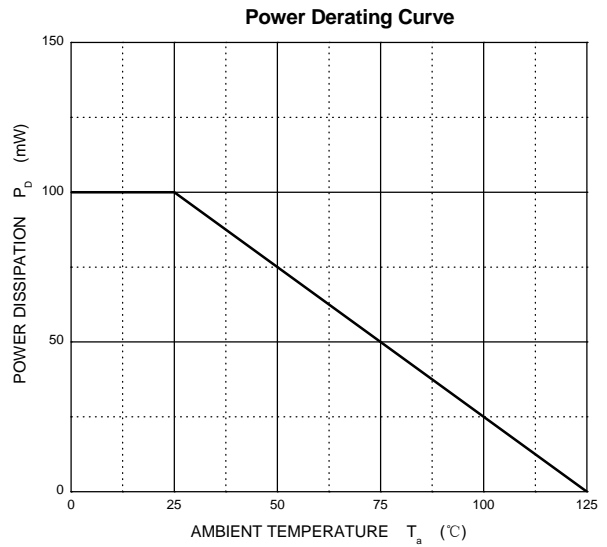
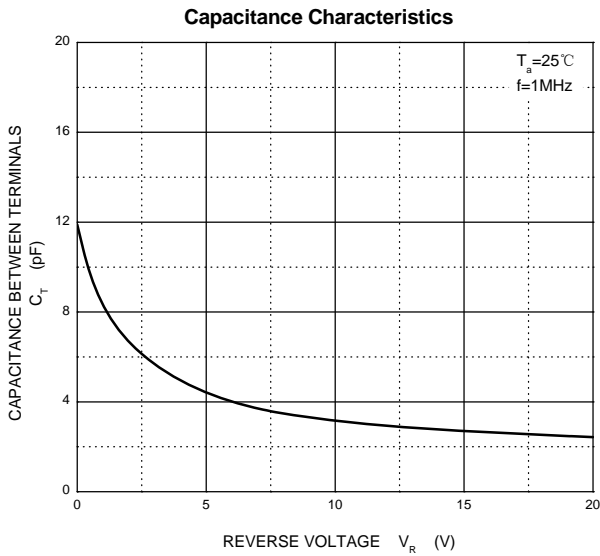
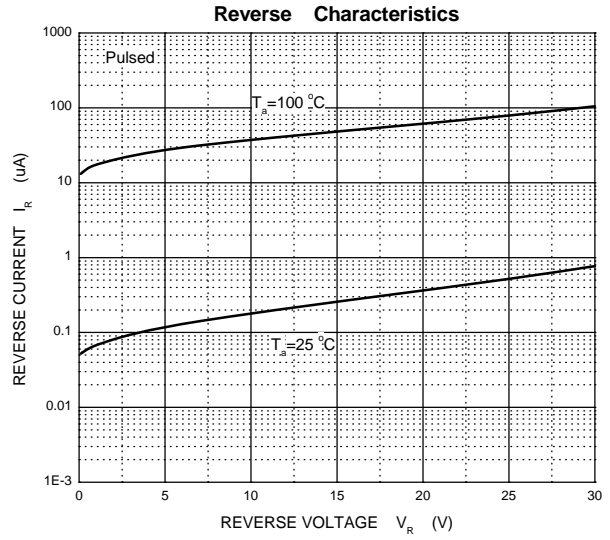
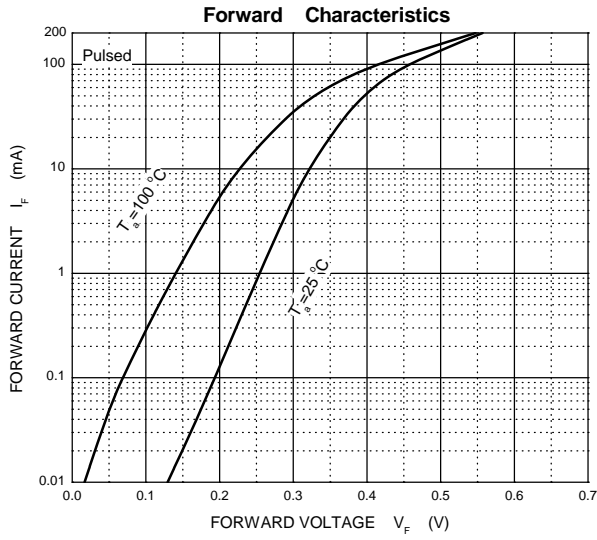
## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	30	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	V
Forward Continuous Current	I <sub>F</sub>	100	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	0.5	A
Power Dissipation	P <sub>D</sub>	100	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	1000	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

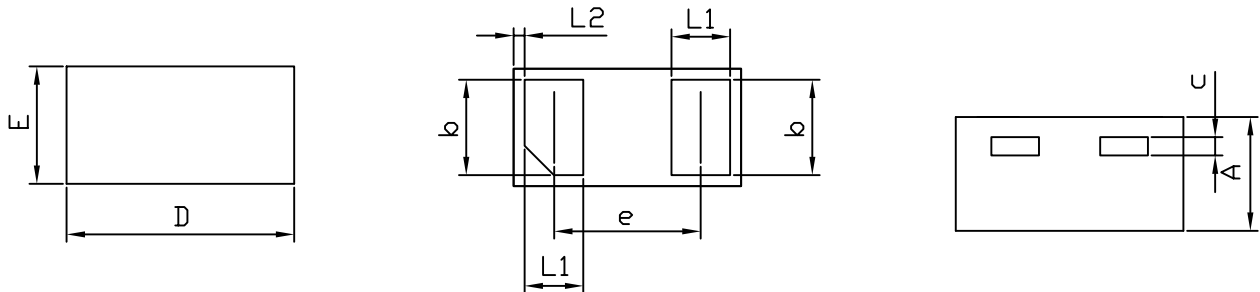
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =50μA	30	-	-	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =10V	-	-	10	μA
		V <sub>R</sub> =30V	-	-	50	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	-	-	0.38	V
		I <sub>F</sub> =100mA	-	-	0.60	V

**Typical Characteristics Curves**

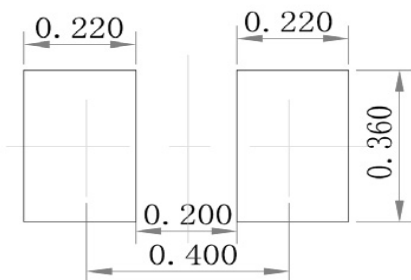


**Package Outline Dimensions DFN0603**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.275	0.340	0.011	0.013
D	0.570	0.670	0.022	0.026
E	0.270	0.370	0.011	0.015
b	0.225	0.295	0.009	0.012
c	0.050 REF.		0.002 REF.	
e	0.365	0.435	0.014	0.017
L1	0.125	0.195	0.005	0.008
L2	0.030 REF.		0.001 REF.	

**Suggested Pad Layout**



**Note:**  
 1. Controlling dimension: in millimeters.  
 2. General tolerance:  $\pm 0.050$ mm.  
 3. The pad layout is for reference purposes only.

**Marking and Ordering Information**

Device	Package	Marking	Quantity	HSF Status
GSRB521F-30	DFN0603	F	10,000pcs / Reel	RoHS Compliant