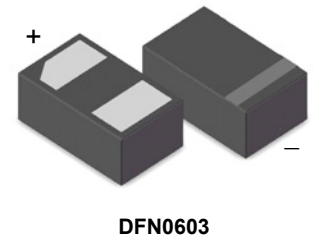


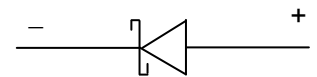
Features

- Forward current ($I_F=100\text{mA}$)
- Low reverse current
- Low forward voltage drop
- Leadless ultra small SMD plastic package



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

Parameter	Symbol	Value	Unit
Reverse Voltage (repetitive peak)	V_{RM}	30	V
Reverse Voltage (DC)	V_R	30	V
Average Rectified Forward Current	I_F	100	mA
Peak Forward Surge Current (8.3ms Single Sine Pulse)	I_{FSM}	3	A
ESD Rating	Human Body Model	>8.0	kV
	Machine Model	>300	V
Thermal Resistance Junction to Ambient ¹	$R_{\theta(JA)}$	500	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Operating Temperature	T_{OPR}	-40 To +150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 To +150	$^\circ\text{C}$

Note1: Mounted on a 1inch² FR-4 board with 1oz Copper, operating to steady state.

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

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V _R	I _R =100μA	30	-	-	V
Forward Voltage	V _F	I _F =1mA	-	-	0.36	V
		I _F =10mA	-	0.4	0.44	V
Reverse Current	I _R	V _R =10V	-	-	0.3	μA
		V _R =30V	-	-	0.5	μA
Junction Capacitance	C _J	F=1MHZ, V _R =5V	-	7	-	pF

Typical Characteristics Curves (T_A=25°C unless otherwise noted)

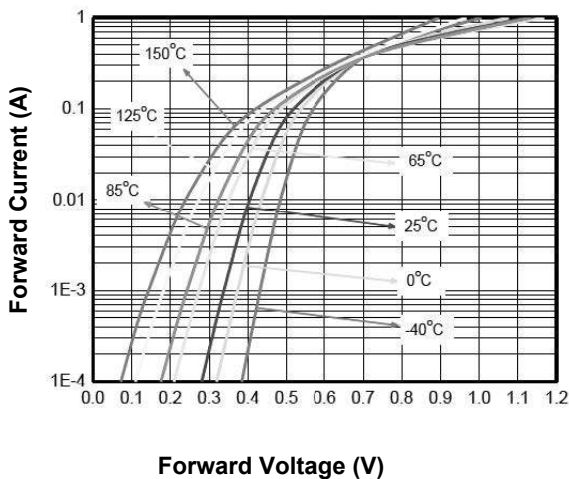


Figure 1. Forward Voltage vs. Forward Current

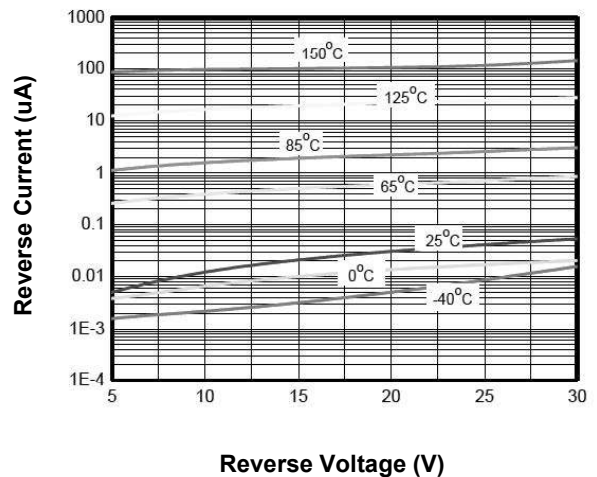


Figure 2. Reverse Current vs. Reverse Voltage

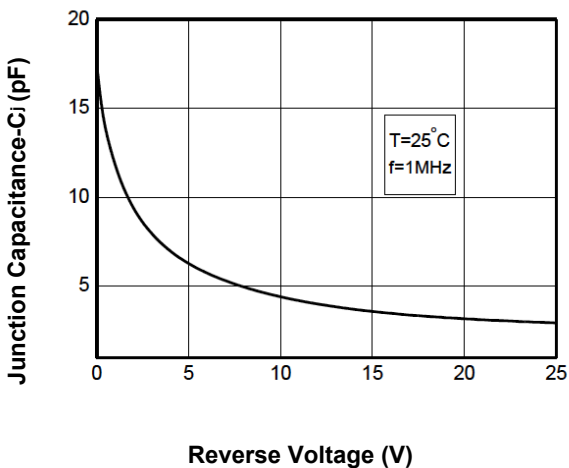
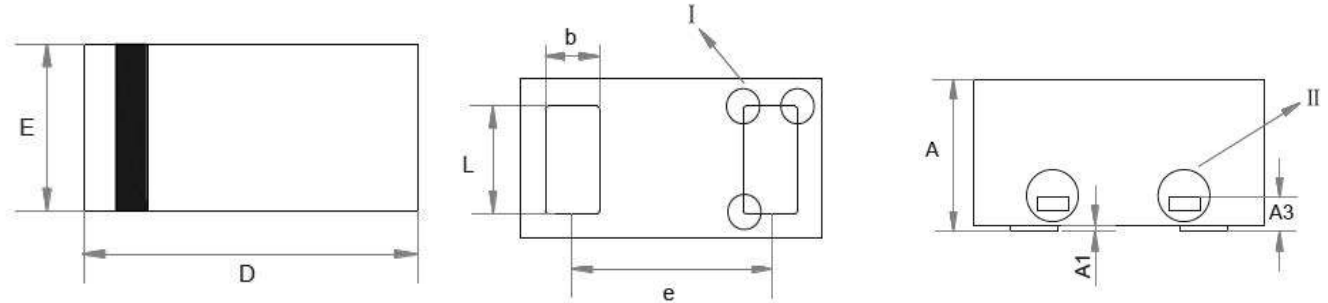


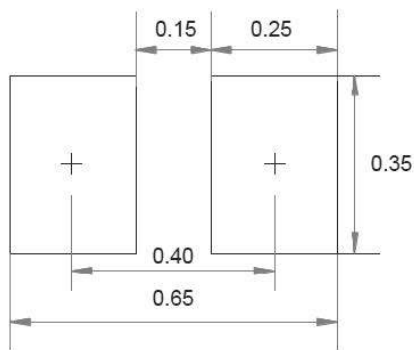
Figure 3. Junction Capacitance vs. Reverse Voltage

Package Outline Dimensions(DFN0603-X5)



Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.23	0.30	0.34
A1	0.00	0.03	0.05
A3	0.10 Ref.		
D	0.55	0.60	0.67
E	0.25	0.30	0.37
b	0.10	0.15	0.20
L	0.20	0.24	0.30
e	0.40 Ref		

Suggested Pad Layout (unit:mm)



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

Marking and Ordering Information

Device	Package	Marking	Quantity	HSF Status
GSRB525F-30	DFN0603	xH (x=DC)	10000pcs / Reel	RoHS/HF Compliant