

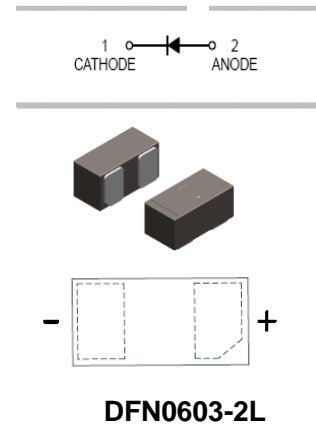


## Features

- High reliability
- Silicon epitaxial planar

## Mechanical Data

- Case: DFN0603-2L
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



## Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
RB521LP3	DFN0603-2L	10000 pcs / Tape & Reel	C

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	30	V
DC Reverse Voltage	V <sub>R</sub>	30	V
RMS Reverse Voltage	V <sub>RMS</sub>	21	V
Maximum Average Forward Output Current	I <sub>F(AV)</sub>	100	mA
Peak Forward Surge Current (8.3ms single half sine-wave)	I <sub>FSM</sub>	0.5	A

## Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	180	mW
Thermal Resistance Junction-to-Air <sup>*1</sup>	R <sub>θJA</sub>	360	°C/W
Thermal Resistance Junction-to-Case <sup>*1</sup>	R <sub>θJC</sub>	200	°C/W
Thermal Resistance Junction-to-Lead <sup>*1</sup>	R <sub>θJL</sub>	350	°C/W
Operating Junction Temperature	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

Note 1: The data tested by surface mounted on a minimum recommended FR-4 board

## Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R = 100\mu\text{A}$	30	-	-	V
Forward Voltage	$V_F$	$I_F = 1\text{mA}$	-	-	0.35	V
		$I_F = 10\text{mA}$	-	-	0.46	V
Maximum Peak Reverse Current	$I_R$	$V_R = 10\text{V}$	-	-	5	$\mu\text{A}$
		$V_R = 30\text{V}$	-	-	10	$\mu\text{A}$

## Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

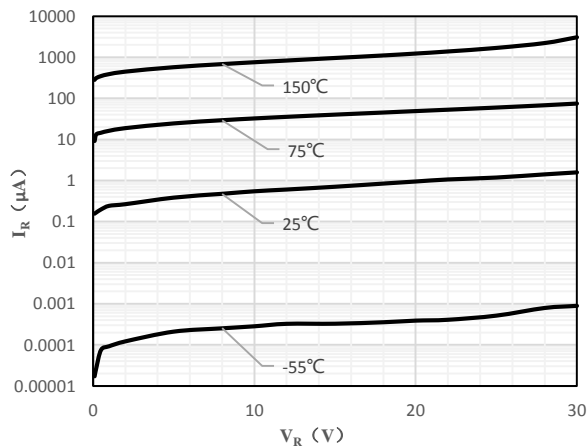


Fig 1 Typical Reverse Characteristic

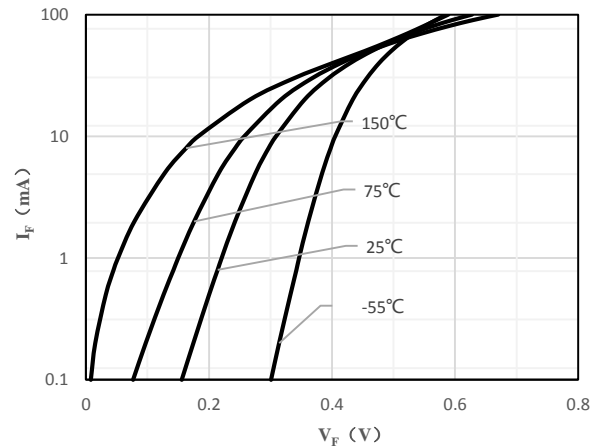


Fig 2 Typical Forward Characteristic

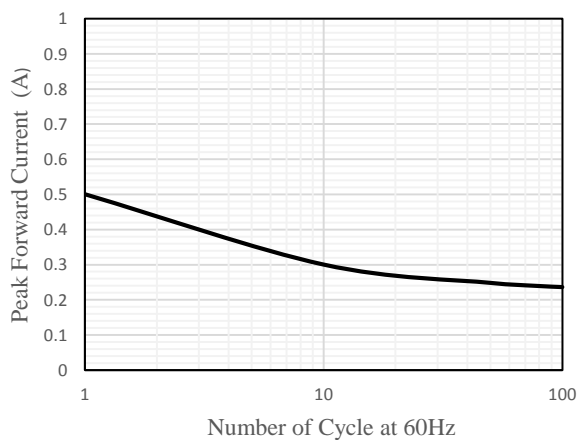


Fig 3 Surge Current Derating Curve

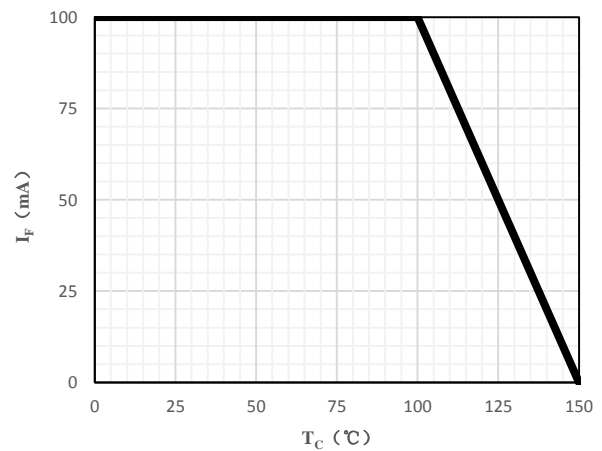
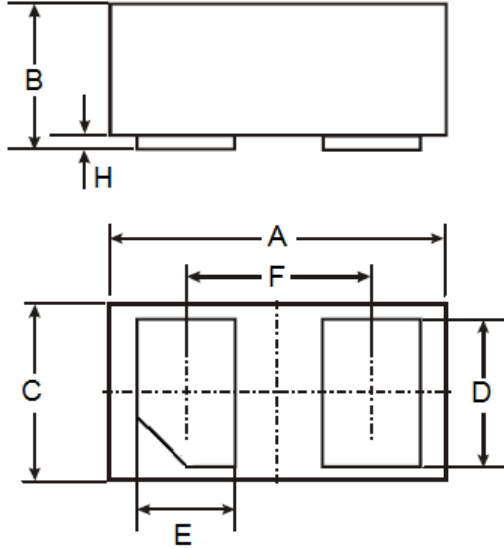


Fig 4 Current Derating

**Package Outline Dimensions** (Unit: mm)



DFN0603-2L			
Dimension	Min.	Typ.	Max.
A	0.595	0.620	0.645
B	0.270	0.300	0.350
C	0.295	0.320	0.345
D	0.190	0.240	0.290
E	0.140	0.190	0.240
F	-	0.355	-
H	0	0.020	0.030

**Mounting Pad Layout** (Unit: mm)

DFN0603-2L

