

Surface Mount Schottky Barrier

SKD0103N2
30V
100mA
DFN0603-2L

Features

- u Fast switching speed
- u Surface mount package ideally suited for automatic insertion
- u Electrical identical standard JEDEC
- u High conductor
- u Lead free in compliance with EU RoHS 2.0
- u Green molding compound as per IEC 61249 standard

Mechanical Data

- u Case: DFN0603-2L, Molded Plastic
- u Terminals: Solderable per MIL-STD-750, Method 2026
- u Approx. Weight: 0.00001 ounces, 0.00028grams
- u Polarity: Color band denotes cathode end

DFN0603-2L


Cathode
Anode

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

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	V
Maximum RMS Voltage	V_{RMS}	21	V
Maximum DC Blocking Voltage	V_R	30	V
Maximum Average Rectified Output Current	$I_{F(AV)}$	100	mA
Power Dissipation	P_D	250	mW
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	500	mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^{\circ}\text{C}$

Note1. Mounted on a FR4 PCB, single-sided copper, mini pad.

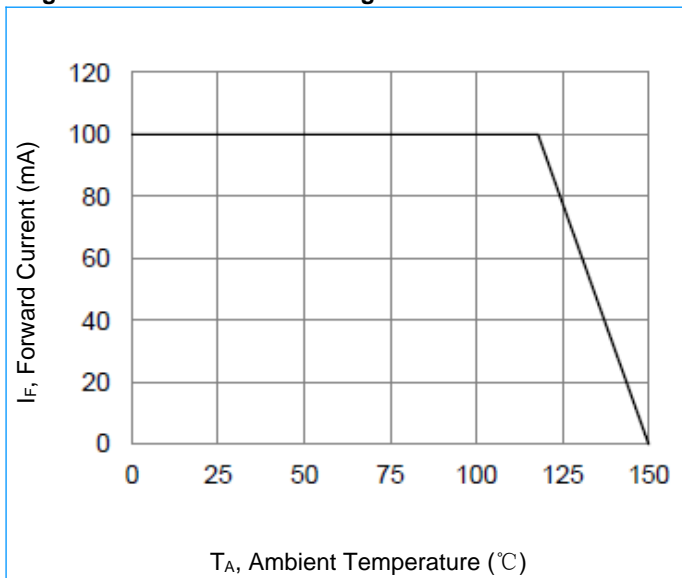
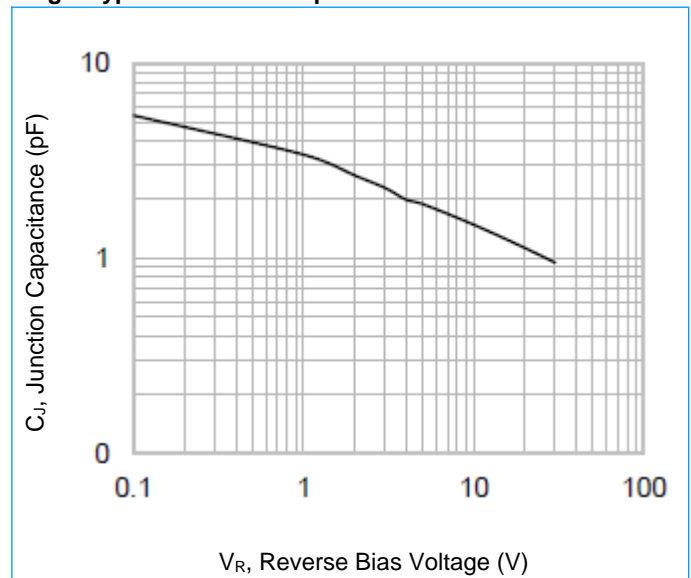
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Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions		Min.	Typ.	Max.	Unit
Breakdown Voltage	V_{BR}	$I_R = 10\mu\text{A}$	$T_A = 25^\circ\text{C}$	30	--	--	V
Instantaneous Forward Voltage	V_F	$I_F = 10\text{mA}$	$T_A = 25^\circ\text{C}$	--	0.33	0.37	V
		$I_F = 100\text{mA}$		--	0.74	1	
		$I_F = 10\text{mA}$	$T_A = 125^\circ\text{C}$	--	0.22	--	V
		$I_F = 100\text{mA}$		--	0.71	--	
Reverse Current	I_R	$V_R = 10\text{V}$	$T_A = 25^\circ\text{C}$	--	--	3	μA
		$V_R = 30\text{V}$	$T_A = 25^\circ\text{C}$	--	--	6	μA
			$T_A = 125^\circ\text{C}$	--	500	--	

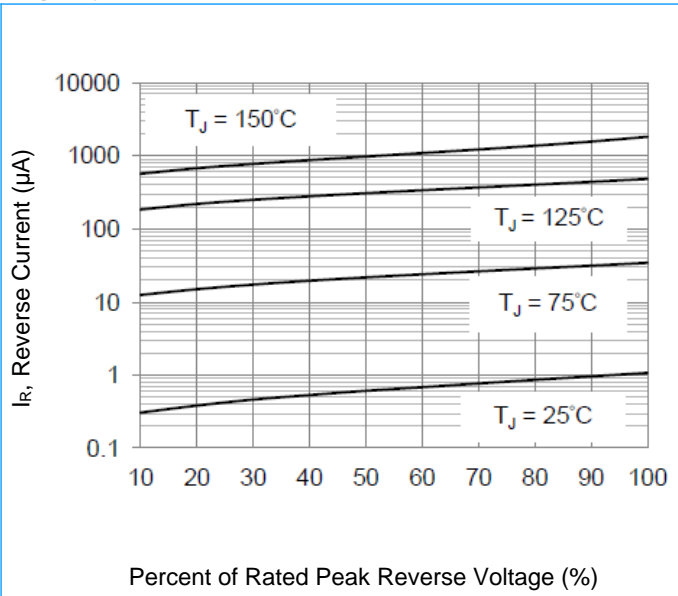
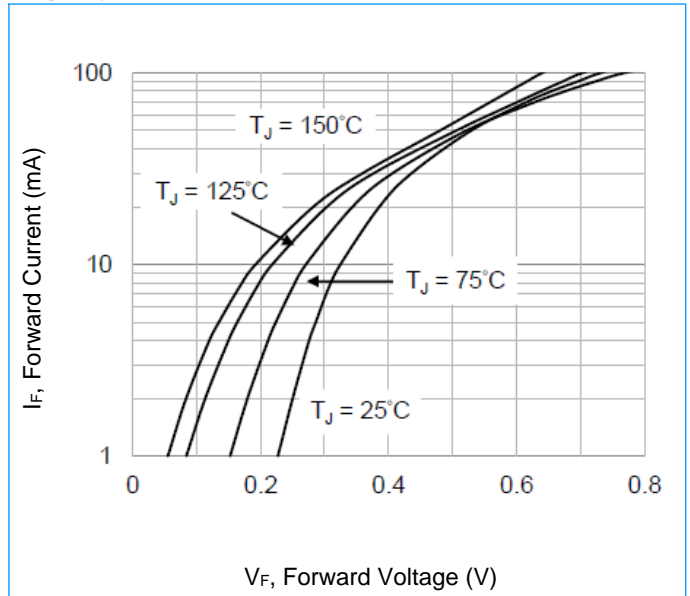
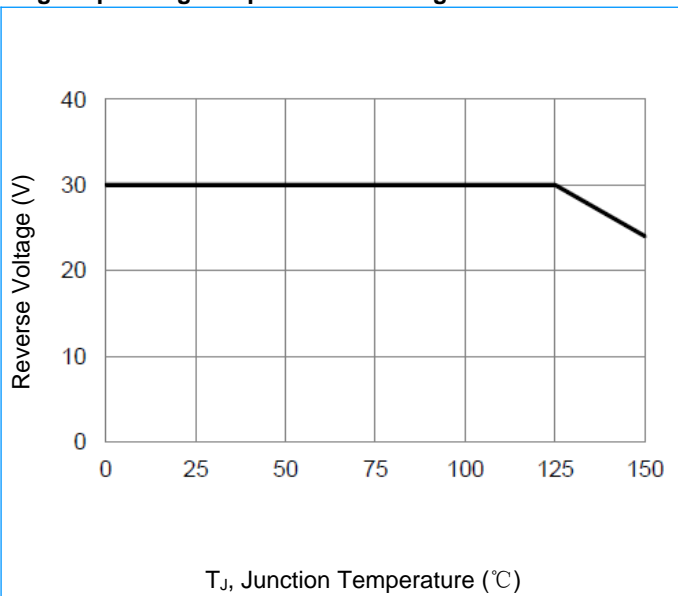
Typical Characteristic Curves

Fig1. Forward Current Derating Curve

Fig2. Typical Junction Capacitance


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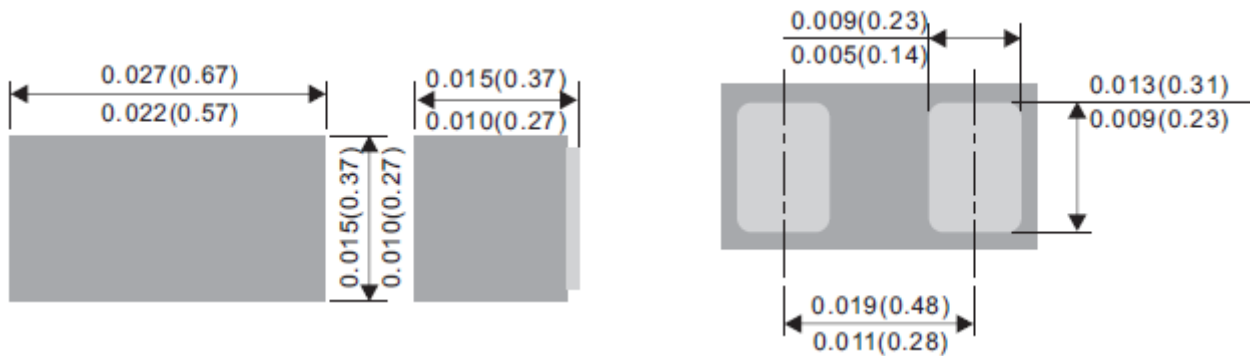
Typical Characteristic Curves (Continue)

Fig3. Typical Reverse Characteristics

Fig4. Typical Forward Characteristics

Fig5. Operating Temperature Derating Curve


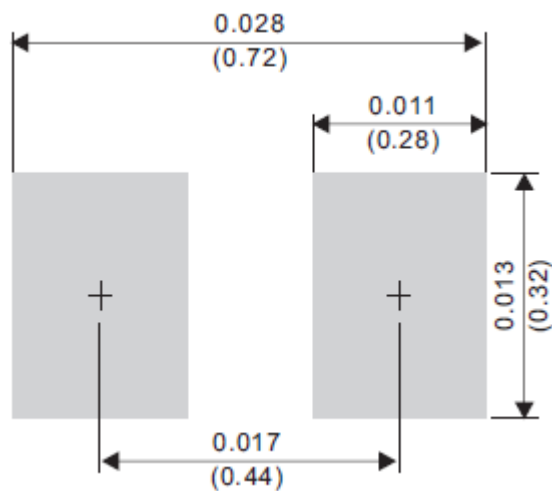
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DFN0603-2L Package Outline Dimensions (Unit: inch(mm))



DFN0603-2L Mounting Pad Layout (Unit: inch(mm))



Ordering Information

Part Number	Package	Quantity
SKD0103N2	DFN0603-2L	10000 PCS per 7" Plastic Reel