

## DFN0603 Plastic-Encapsulate Diodes Schottky Barrier Diode

Green Product

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

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	100	mW
T <sub>STG</sub>	Storage Temperature Range	-55 to +125	°C
T <sub>J</sub>	Operating Junction Temperature	+125	°C
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	30	V
I <sub>O</sub>	Average Rectified Output Current	100	mA
I <sub>FSM</sub>	Peak Forward Surge Current (At 8.3ms single half sine-wave)	0.5	A

These ratings are limiting values above which the serviceability of the diode may be impaired.




DFN0603



### Specification Features:

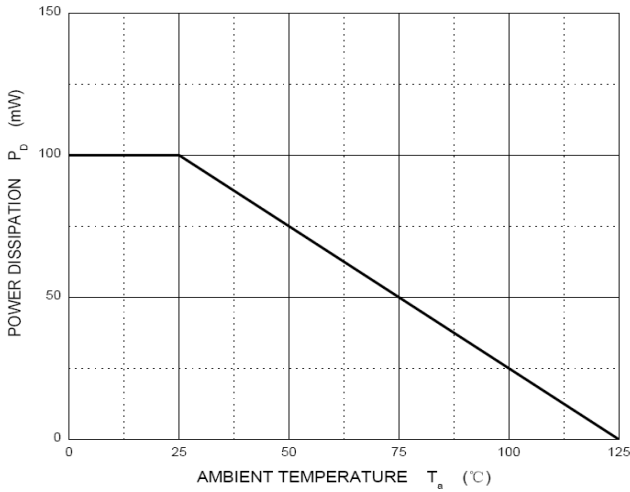
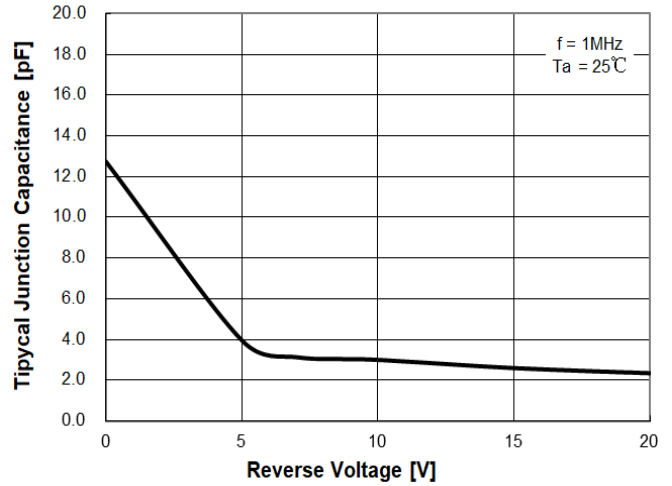
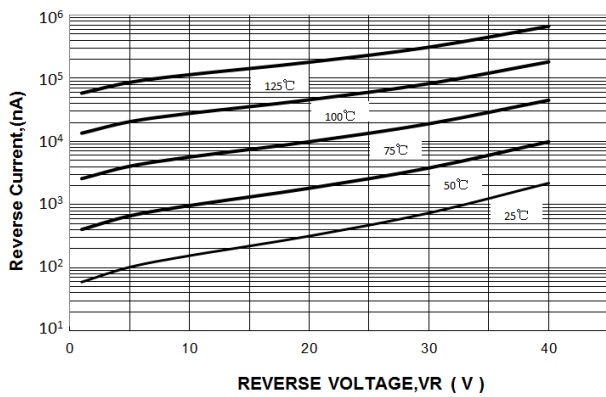
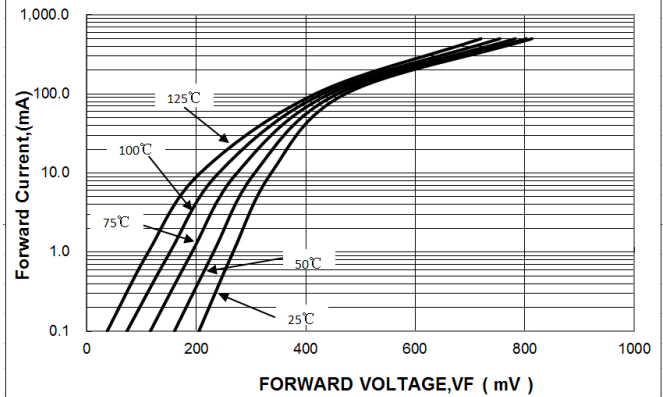
- § Small surface mounting type
- § Low reverse current and low forward voltage
- § RoHS Compliant
- § Green EMC
- § Matte Tin(Sn) Lead Finish
- § Band Indicates Cathode
- § Weight: approx. 0.24mg

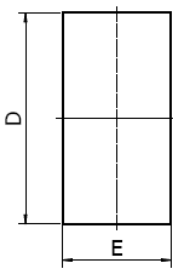
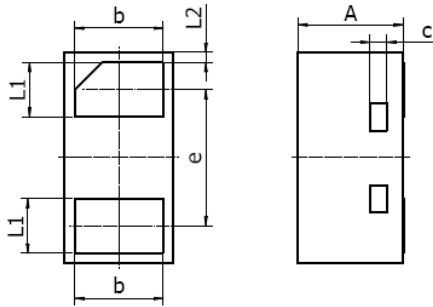
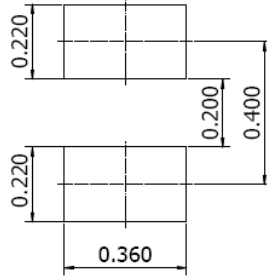
### DEVICE MARKING CODES:

Device Type	Marking	Shipping
DS520-30EAA02		10,000/Reel

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

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B <sub>V</sub>	Breakdown Voltage	I <sub>R</sub> =50μA	30		Volts
I <sub>R</sub>	Reverse Leakage Current	V <sub>R</sub> =10V V <sub>R</sub> =30V		0.3 20	μA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =10mA I <sub>F</sub> =100mA		0.45 0.65	Volts

**RATING AND CHARACTERISTIC CURVES**
**Power Derating Curve**

**Capacitance Characteristics**

**TYPICAL REVERSE CHARACTERISTICS**

**TYPICAL FORWARD VOLTAGE CHARACTERISTICS**


**DFN0603 Package Outline**

**Suggested Pad Layout**


DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.27	0.35	0.011	0.013
D	0.57	0.67	0.022	0.026
E	0.27	0.37	0.011	0.015
b	0.225	0.295	0.009	0.012
c	0.050REF		0.002REF	
e	0.365	0.435	0.014	0.017
L1	0.125	0.195	0.005	0.008
L2	0.030REF		0.001REF	

## NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.takcheong.com>, or consult your nearest Tak Cheong's sales office for further assistance.