



# **Switching Diode**

## Power Dissipation - 200 mWatts

### **Features**

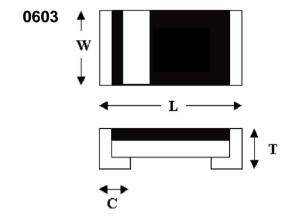
- Silicon epitaxial planar diode
- SMD chip pattern, suit for all kinds of SMT process
- Small size for PCB space saving
- 0603 size as SOD-523 equivalent
- Leadfree and RoHS compliance components

#### **Mechanical Data**

●Size: 0603

●Weight: approx. 4mg

Marking: Cathode terminal



Dimension/mm	0603
L	1.55±0.1
W	0.8±0.1
Т	0.65±0.1
С	0.35±0.1

Package Outline Dimensions in Millimeters

### **Maximum Ratings and Electrical Characteristics**

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	Value	Unit
Forward Power Dissipation Power derating above 25°C	Ptot	200	mW
		1.6	mW/ ℃
Junction Temperature	Tj	150	°C
Thermal Resistance Junction to Ambient air	RөJA	375	°C/W
Operating& Storage Temperature range	Tstg	-55 to +150	°C
Repetitive Peak Reverse Voltage	VRRM	90	V
DC Reverse Voltage	VR	80	V
Average rectified current sin half wave rectification with resistive load	lf(AV)	100	mA
Repetitive Peak Forward Current at Tamb=25°C	IFRM	225	mA
n-Repetitive Surge Forward Current at t<1s and Tj=25℃ ≤8.3ms and Tj=25℃	IFSM	400	mA
		800	IIIA
Forward Voltage at IF=10mA at I =100mA	VF	1.0 MAX	V
		1.2 MAX	V
Leakage Current at VR=20V	IR	0.025 MAX	uA
Leakage Current at V =80V		0.1 MAX	uA
Capacitance at VR=0V, f=1MHz	Ctot	3 MAX	pF
Reverse Recovery Time at IF =IR=10mA,RL=100Ω	trr	4 MAX	ns

Notes: Valid provided that electrodes are kept at ambient temperature.

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Figure 1. Forward Characteristic

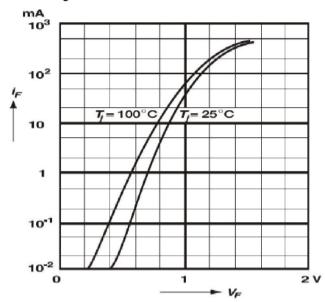


Figure 2. Power De-rating

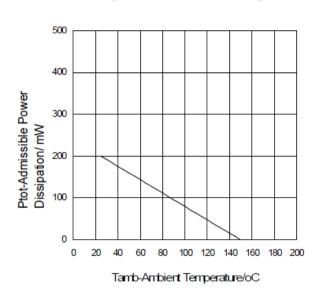


Figure 3. Forward Current Derating

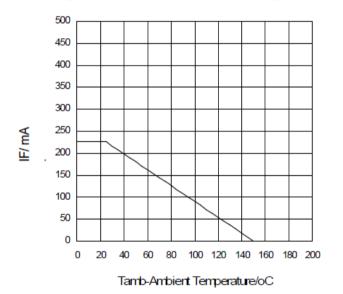
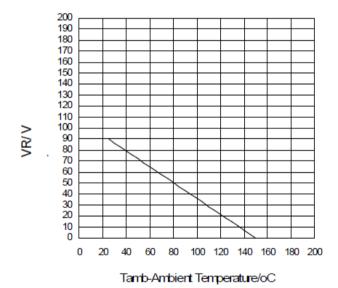


Figure 4. Reverse Voltage De-rating



The curve above is for reference only.

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