FEATURES

- Protects I/O lines etc.
- Low Clamping Voltage
- Low leakage current
- Solid-state silicon-avalanche technology
- High Polymer Material for faster response time
- Response Time is Typically <0.5 ns
- ROHS compliant in Lead-Free versions

APPLICATIONS

- Notebooks and PC peripheral accessories
- Digital consumer electronics, MID, Bluetooth and Wi-Fi equipment
- Household Audio, Car Stereo
- Monitors and Flat Panel Displays
- Set Top BOX and OTT Box, DVBT
- Networking and Telecom equipment, such as cellphone, Net Switch, Router
- Medical Electronic such as Sphygmomanometer, Blood Glucose Meter
- Security equipment such as CCTV Camera, DVR,NCR, Optical Transceiver
- Industrial Equipment

IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD)
  ±15kV (air), ±8kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 5A (8/20ns)

ELECTRICAL CHARACTERISTICS

(T_A=25℃ Unless otherwise noted)

P/N	Working Voltage (V_{DC})	Trigger Voltage(V_V) OVv=±30%	Clamping Voltage (Vc)	Capacitance (Cp)	Capacitance Tolerance (△Cp)	Leakage Current (I_L)
BTR06D3-MS	3V	10V	8V	2.5PF	±1.5pF	<1nA

ELECTRICAL PARAMETERS (T=25℃)

Symbol	Parameter
V_{DC}	Maximum DC Operating Voltage
V_V	In the case of electrostatic discharge, Vv is the turn-on voltage of ESD suppressor instant grounding
V_C	Per IEC61000-4–2,level 4 waveform(8KV contact discharge mode,30A), measurement made 30ns after initiation of pulse
C_P	capacitance measurement at 1MHz test frequency
V_{BR}	Breakdown Voltage
I_L	Leakage Current

ABSOULTE MAXIMUM RATINGS

(T_A=25℃ Unless otherwise noted)

Parameter	Symbol	Typical	Unit
Peak Pulse Power (tp = 8/20 μs)	Ppk	180	W
Operating Junction Temperature	T_J	-55 ~ 125	℃
Storage Temperature Range	T_{STG}	-55 ~ 150	℃
Lead Soldering Temperature	T_L	260 (10sec)	℃

ENVIRONMENTTAL SPECIFICATIONS

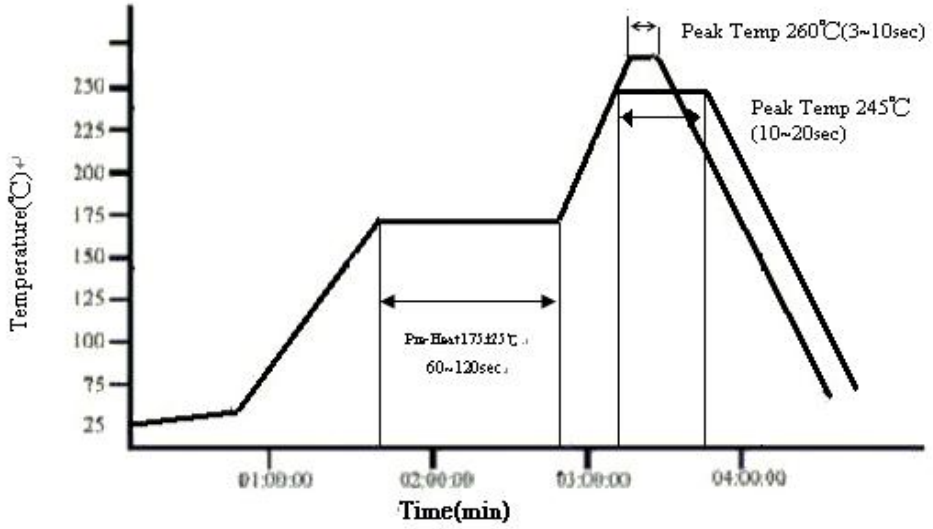
Characteristics	Specifications	Test Condition
Bias humidity	△VvNv <=±10%	90%RH,40 ℃,Working voltage,1000 hours
Thermal shock		-40 ℃ to 85 ℃,30 min. cycle,5 cycles
Full load voltage		Working voltage,85 ℃,1000hours
Solder leach resistance	1.0VvNv <=±10% 2.Ir<=50mA at working voltage 3.Solder Wetting area>=95%	260 ℃,10s

PACKAGE MECHANICAL DATA

Dimension	Unit: Millimeters	
	Min.	Max.
A	0.9	1.2
B	2.7	3.2
C	0.7	1.0
D	0.9	1.2

0603

The IR reflow and temperature of Soldering for Pb Free



☆ **IR reflow Pb Free Process suggestion profile**

(1) The solder recommend is Sn96.5/Ag 3.5 of 120 to 150 μm
(2) Ramp-up rate (217℃ to Peak) + 3℃/second max
(3) Temp. maintain at 175 +/-25℃ 180 seconds max
(4) Temp. maintain above 217 ℃ 60-150 seconds

REEL SPECIFICATION

P/N	PKG	QTY
BTR06D3-MS	0603	4000

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