# MSKSEMI 美森科













ESD

TVS

TSS

MOV

GDT

PLED

**BTCxxxN-MS** 

# **Product specification**





#### **Features**

- High insulation resistance: 1GΩ@100V
- Size design: 4.5\*3.2\*2.7mm
- Surge capability: 2KA@8/20us
- Very low capacitance:0.5pF@1MHz,0V

#### **Reference News**

# PACKAGE OUTLINE Schematic Symbol Image: Control of the symbol Image: Control of the symbol 1 1 1812 1

# Applications

AC Power



# Electrical characteristics(T=25℃)

| Model Name | DC<br>spark- over<br>Voltage | Tolerance of<br>Vs | Max .<br>Impulse<br>Breakdown<br>Voltage | Discharge<br>Current<br>(8/20us) | Minimum Insulation Resistan<br>ce |      | Max.<br>Capacitance<br>1 MHz |
|------------|------------------------------|--------------------|--|----------------------------------|-----------------------------------|------|------------------------------|
|            | 100V/S                       |                    | 1KV/us                                   | 10 times                         |                                   |      |                              |
|            | V                            | %                  | V  | KA                               | Test Voltage<br>DC(V)             | (GΩ) | (Pf)                         |
| BTC075N-MS | 75                           | ±30                | 600                                      | 2                                | 50                                | 1    | <0.5                         |
| BTC900N-MS | 90                           | ±30                | 600                                      | 2                                | 50                                | 1    | <0.5                         |
| BTC151N-MS | 150                          | ±20                | 600                                      | 2                                | 100                               | 1    | <0.5                         |
| BTC231N-MS | 230                          | ±20                | 800                                      | 2                                | 100                               | 1    | <0.5                         |
| BTC301N-MS | 300                          | ±20                | 850                                      | 2                                | 100                               | 1    | <0.5                         |
| BTC351N-MS | 350                          | ±20                | 950                                      | 2                                | 100                               | 1    | <0.5                         |
| BTC401N-MS | 400                          | ±20                | 1000                                     | 2                                | 100                               | 1    | <0.5                         |
| BTC471N-MS | 470                          | ±20                | 1 100                                    | 2                                | 100                               | 1    | <0.5                         |
| BTC601N-MS | 600                          | ±20                | 1300                                     | 2                                | 100                               | 1    | <0.5                         |

#### Notes:

1) At delivery AQL 0.65 level II ISO 2828. 1-2003

2) In ionized mode

3) Terms and current waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21



#### **Environmental Reliability Characteristics**

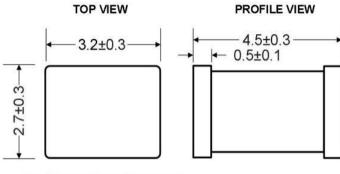
| Testing items                 | Technical standards  |  |
|-------------------------------|--|--|
| High Temperature Storage Test | Temperature: 90 ℃<br>Time:2H   |  |
| Low Temperature Storage Test  | Temperature: -40 ℃<br>Time:2H  |  |
| Vibration                     | Frequency: 10-500Hz<br>Amplitude: 0 . 15mm<br>Time: 45mins           |  |
| Resistance of soldering heat  | Temperature: $260 \pm 5$ °C<br>Time of dip soldering: $10s$ , 1 time |  |

Note:Up-screen program can be specified by customer's request via contacting MSKSEMI service

#### **Soldering parameters**

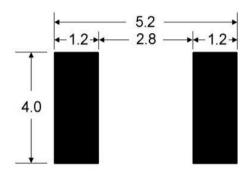
| Solderability | SolderPotTemperature | <b>245</b> ℃±5℃ |  |
|---------------|----------------------|-----------------|--|
|               | SolderDwellTime      | 4-6seconds      |  |

#### Package mechanical data



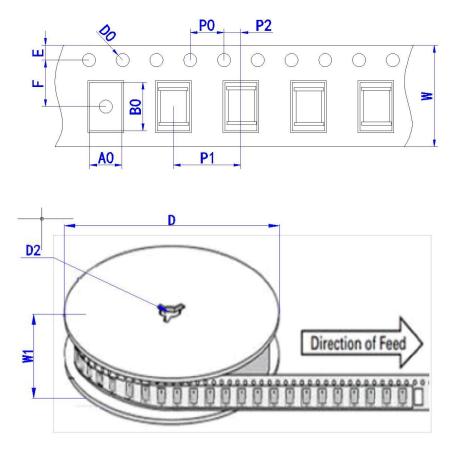
Dimensions in mm

SOLDER PAD LAYOUT





## Tape & reel specification



| Sym . | Dimensions(mm) |  |
|-------|----------------|--|
| A0    | 3.90±0.20      |  |
| В0    | 4.90±0.20      |  |
| D0    | φ 1.50±0. 10   |  |
| E     | 1.75±0.20      |  |
| F     | 5.50±0.20      |  |
| P1    | 8.00±0.20      |  |
| P0    | 4.00±0.20      |  |
| P2    | 2.00±0.20      |  |
| W     | 12.00±0.30     |  |
| W1    | 16.80±2.00     |  |
| D     | φ333±4.00      |  |
| D2    | φ 13.±0.2      |  |

### Marking & Packeging Information

| Marking | Packaging | Reel Size |
|---------|-----------|-----------|
| /       | 2500/Ree  | el 330mm  |



#### **Attention**

■ Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.

MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all MSKSEMI Semiconductor products described or contained herein.

Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.

MSKSEMI Semiconductor. strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with someprobability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits anderror prevention circuits for safedesign, redundant design, and structural design.

■ In the event that any or all MSKSEMI Semiconductor products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from theauthorities concerned in accordance with the above law.

■ No part of this publication may be reproduced or transmitted in any form or by any means, electronic or

mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.

Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements intellectual property rights or other rights of third parties.

Any and all information described or contained herein are subject to change without notice due to

product/technology improvement, etc. Whendesigning equipment, referto the "Delivery Specification" for the MSKSEMI Semiconductor productthat you intend to use.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Gas Discharge Tubes - GDTs / Gas Plasma Arrestors category:

Click to view products by MSKSEMI manufacturer:

Other Similar products are found below :

 PMT1023004
 PMT1025001
 RF3161-000
 PMT1035004
 PMT1040004
 PMT809006
 CG2250
 CG2800
 CG31.5L
 GT-SMD181240012-TR

 WPGT-2N145B6L
 WPGT-2N230B6L
 WPGT-2N470B6L
 WPGT-2R470B6L
 WPGT-2RM230A6L
 WPGT-2RM350A6L
 WPGT 

 2RM70A6L
 WPGT-2RM90A6L
 WPGT-2S145
 WPGT-2S350
 WPGT-2S470
 WPGT-3R350CF
 WPGT-3R350G1
 WPGT-3R90G1
 WPGT 

 3R75G1
 WPGT-3R470G1
 WPGT-3R250C
 WPGT-3R230G1
 WPGT-2S230
 WPGT-2RM470A6L
 WPGT-2RM145A6L
 WPGT-2R3000B8L

 WPGT-2R2700B8L
 WPGT-2R1000B8L
 WPGT-2N90B6L
 WPGT-2N70B6L
 WPGT-2N350B6L
 WPGT-2N230B6L1
 CG90
 CG2230

 CG2145
 CG21000
 GT-SMD181215012-TR
 9071.99.0547 (73\_Z-0-0-547)
 B88069X6940B152
 V20-1+NPE-280
 V20-3+NPE+FS-280

 SD09-V24 9
 C50-0-255
 SG24PA300
 SG24PA300
 SG24PA300
 SG24PA300
 SG24PA300