



# GDTN3RS5-XX

## Gas Discharge Tube

### Features

- 3-electrode arrester
- Very small size
- Extremely fast response time
- Stable performance over life
- Extremely low capacitance (<1pF)
- High insulation resistance



### Application

- Modem
- Splitter
- Base stations

### Electrical Specifications

Part number	DC Spark-over Voltage <sub>1) 2)</sub>	Maximum Impulse Spark-over Voltage	Service Life <sub>3)</sub>	Insulation resistance	Capacitance	Marking
	100V/s	1kv/ $\mu$ s	8/20 $\mu$ s 10times	@ 100V <sub>DC</sub>	@ 1 MHz	
	(V)	(V)	(KA)	(G $\Omega$ )	(pF)	
GDTN3RS5-90	90 $\pm$ 30%	600	10	>1@50V <sub>DC</sub>	< 1	3R 90
GDTN3RS5-150	150 $\pm$ 20%	650	10	> 1	< 1	3R 150
GDTN3RS5-230	230 $\pm$ 20%	700	10	> 1	< 1	3R 230
GDTN3RS5-350	350 $\pm$ 20%	900	5	> 1	< 1	3R 350
GDTN3RS5-420	420 $\pm$ 20%	900	5	> 1	< 1	3R 420
GDTN3RS5-470	470 $\pm$ 20%	1100	5	> 1	< 1	3R 470
GDTN3RS5-600	600 $\pm$ 20%	1300	5	> 1	< 1	3R 600

1) At delivery AQL 0.65 level II, DIN ISO 2859.

2) In ionized mode.

3) Tests according to ITU-T Rec. K. 12 and UL 497B.

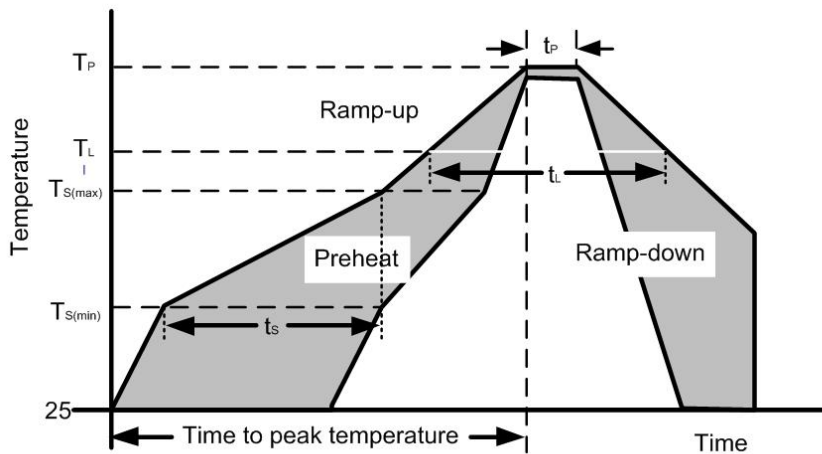
Terms and current waveforms in accordance with: ITU-T Rec. K.12; IEC 61643-21 and DIN 57845/VDE0845.

**Thermal Consideration**

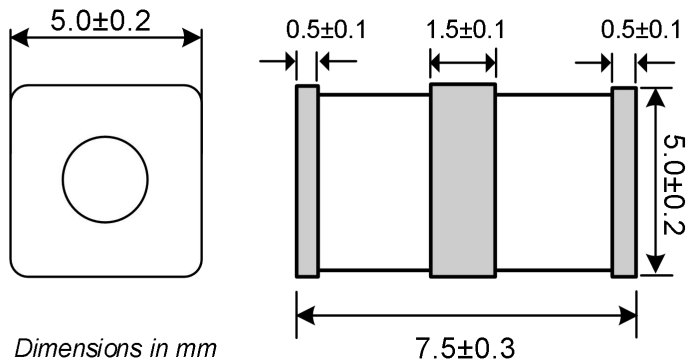
Parameter	Value	Unit
Storage & Operating temperature range	-40 to +90	°C

**Soldering Parameters**

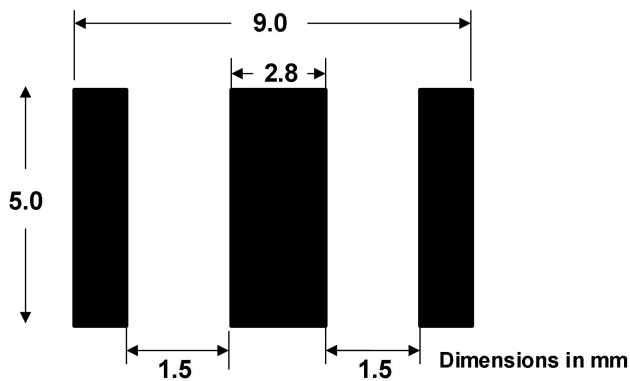
Reflow Condition		Pb – Free assembly
Pre Heat	Temperature Min ( $T_{s(min)}$ )	150°C
	Temperature Max ( $T_{s(max)}$ )	200°C
	Time (min to max) ( $t_s$ )	60 – 180 secs
Average ramp up rate (Liquidus Temp) ( $T_L$ ) to peak		3°C/second max
$T_{s(max)}$ to $T_L$ Ramp-up Rate		3°C/second max
Reflow	Temperature ( $T_L$ ) (Liquidus)	217°C
	Temperature ( $t_L$ )	60 – 150 seconds
Peak Temperature ( $T_P$ )		260 <sup>+0/-15</sup> °C
Time within actual peak Temperature ( $t_p$ )		30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature ( $T_P$ )		8 minutes Max.
Do not exceed		260°C



## Dimensional Drawing



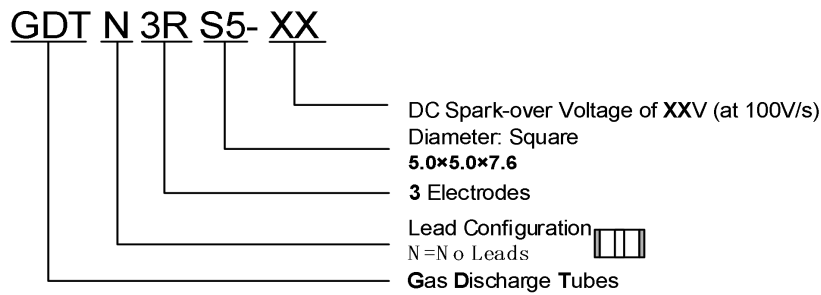
## Solder Pad Layout



## Cautions and Warnings

- Gas Discharge Tubes must not be operated directly in power supply networks.
- Gas Discharge Tubes may become hot in case of longer periods of current stress (danger of burning).
- Gas Discharge Tubes may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged Gas Discharge Tubes must not be re-used.

## Part Numbering and Marking System



## Package Information

Tape and reel:1000 pcs per reel.

## Contact Information

No.1001, Shiwan(7) Road, Pudong District, Shanghai, P.R.China.201207

Tel: 86-21-68969993 Fax: 86-21-50757680 Email: market@way-on.com

WAYON website: <http://www.way-on.com>

For additional information, please contact your local Sales Representative.

**WAYON** ® are registered trademarks of Wayon Corporation.

*Specifications are subject to change without notice.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.*