

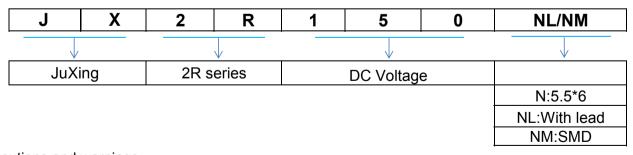


| Features | | Applications |
|----------|---|--------------|
| • | Extremely small size | Splitter |
| • | Eexcllent SMD handing | PCI Cards |
| • | Stable performance over life | Morden |
| • | Very low capacitance | Line cards |
| • | High insulation resistance | |
| • | Storage and operating temperature -40+125°C | |
| • | RoHS-compatible | |
| • | UL-identification | |
| • | Extremely fast response time | |

Electrical specifications

| Part Number | DC spark-over Voltage | Max. Impulse Breakdown Voltage 1KV/us | Discharge Current (8/20us) | AC discharge Current | Impulse Life (10/1000us) | Minimum Insulation Resistance | | Max. Capacitance 1MHz |
|-------------|-----------------------------|---|----------------------------------|----------------------------|--------------------------------|-------------------------------------|------|-----------------------------|
| | % | V | KA | Α | Times | Test Voltage DC(V) | (GΩ) | (Pf) |
| 2R75NL/NM | ±30 | 600 | 5 | 5 | 100 | 50 | 1 | 1 |
| 2R90NL/NM | ±30 | 600 | 5 | 5 | 100 | 50 | 1 | 1 |
| 2R150NL/NM | ±20 | 600 | 5 | 5 | 100 | 100 | 1 | 1 |
| 2R230NL/NM | ±20 | 800 | 5 | 5 | 100 | 100 | 1 | 1 |
| 2R300NL/NM | ±20 | 850 | 5 | 5 | 100 | 100 | 1 | 1 |
| 2R350NL/NM | ±20 | 950 | 5 | 5 | 100 | 100 | 1 | 1 |
| 2R400NL/NM | ±20 | 1000 | 5 | 5 | 100 | 100 | 1 | 1 |
| 2R470NL/NM | ±20 | 1100 | 5 | 5 | 100 | 100 | 1 | 1 |
| 2R600NL/NM | ±20 | 1200 | 5 | 5 | 100 | 100 | 1 | 1 |

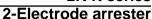
Part Number Code



Cautions and warnings

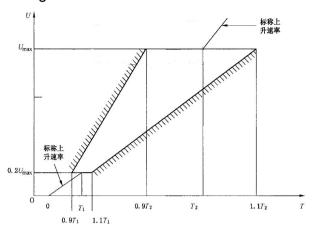
- Surge arresters must not be operated directly in power supply networks
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- If the contacts of the surge arrester are defective, current stress can lead to the formation of sparks and loud noises.
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.







DC breakdown voltage



8/20us, Test wave

T1=1.25T=8us±20%

T2=20us±20%

10/700us, Test Wave

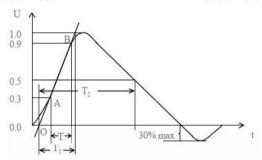
T1=1.67T=10us±20%

T2=700us±20%

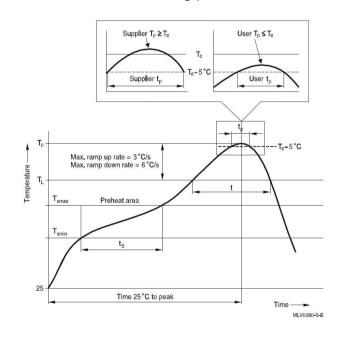
10/1000us, Test Wave

T1=1.67T=10us±20%

T2=1000us±20%



Recommended wave slodering profile



| Reflow profile features | | Sn- Pb eutectic assembly | Pb-free assembly |
|--|--|------------------------------|------------------------------|
| Preheat and soak - Temperature min - Temperature max - Time | T _{smin} T _{smax} t _{smin} to t _{smax} | 100 °C 150 °C 60 120 s | 150 °C 200 °C 60 180 s |
| Average ramp-up rate | T _{smax} to T _p | max. 3 °C/ s | max. 3 °C/ s |
| Liquidous temperature Time at liquidous | T _L | 183 °C 60 150 s | 217 °C 60 150 s |
| Peak package body temperature *, Classification temperature ** | T _p , T _C | 220 235 °C ** | 245 260 °C ** |
| Time (t _p) ** within 5 °C of the specified classification temperature (T _C) | | 20 s *** | 30 s *** |
| Average ramp-down rate | T _p to T _{smax} | max. 6 °C/ s | max. 6 °C/ s |
| Time 25 °C to peak temperature | | max. 6 min | max. 8 min |

version: 02

and a user maximum.

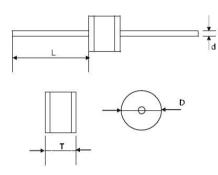
** = For details please refer to JEDEC J-STD-020D.

^{*** =} Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

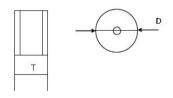




- Sampling size in accordance to AQL(C=0)
- DC spark-over voltage ±30% after load
- Tests according to ITU-T Rec. K. 12 and IEC61643-1



| | | Uni |
|------|-------|-----------|
| ш | Dim | ensions |
| Item | Spec. | Tolerance |
| D | 5.5 | +0.3/-0.5 |
| Т | 6.0 | +0.3/-0.5 |
| Ľ | 20 | Min. |
| d | 0.8 | ±0.05 |



| | 2.1 | Unit:mm | | |
|------|------------|-----------|--|--|
| 14 | Dimensions | | | |
| Item | Spec. | Tolerance | | |
| D | 5.5 | +0.3/-0.5 | | |
| Т | 6.0 | +0.3/-0.5 | | |

Packaging

