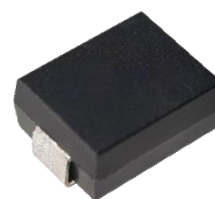


Description

CMSLDV220P102 are semiconductor device designed to provide protection against over voltage transients. The device is designed to suppress a variety of transient events, including those specified in IEC61000-4-2, IEC61000-4-5 and other standards used for Electromagnetic Compliance (EMC). CMSLDV221P102 is specially designed for power-line protection, it features a very high current protection capability with a very small size, also a very fast response and very low clamping voltage.

Features

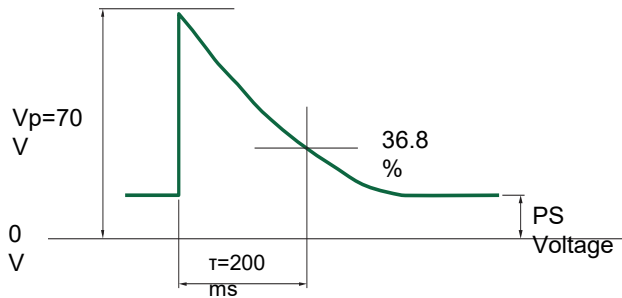
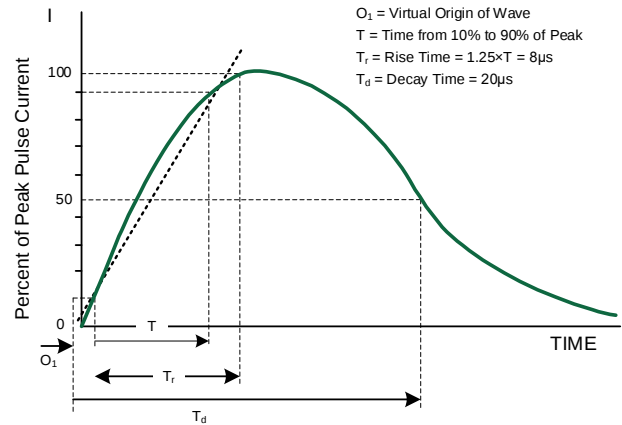
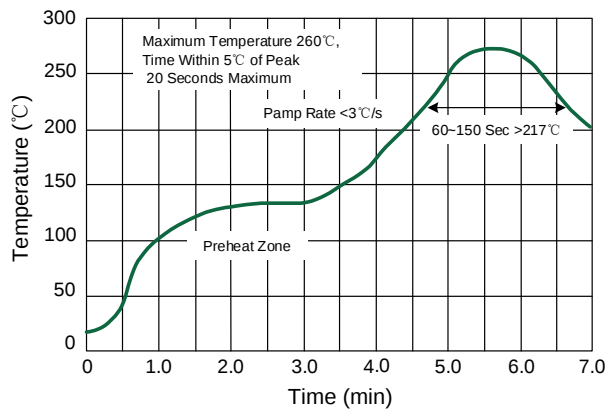
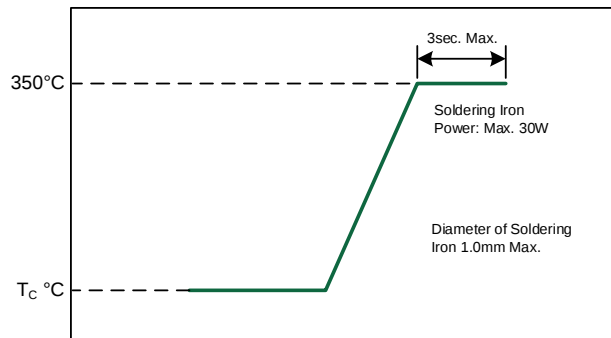
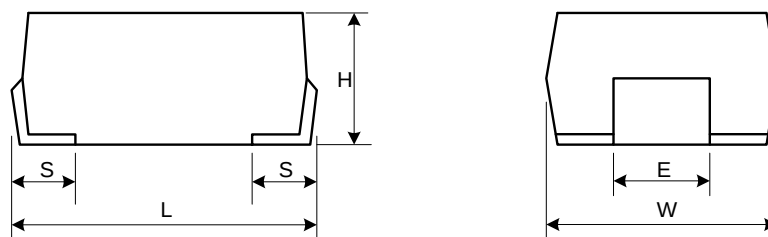
- Low leakage current
- Excellent clamping capability
- High reliability
- High energy absorption capability
- Application in surge protection of AC supply systems
- SMD type body size 3025
- Suitable for lead-free soldering
- IEC-61000-4-2 ESD 8kV (Air), 15kV (Contact)
- Meet for load dump surge test (JASO D 001-94)
[V_p=70 V, τ =200 ms, R_i=0.8 Ω]
- Meet for load dump surge test ISO7637-2
- AEC - Q200 compliant



General Technical Data

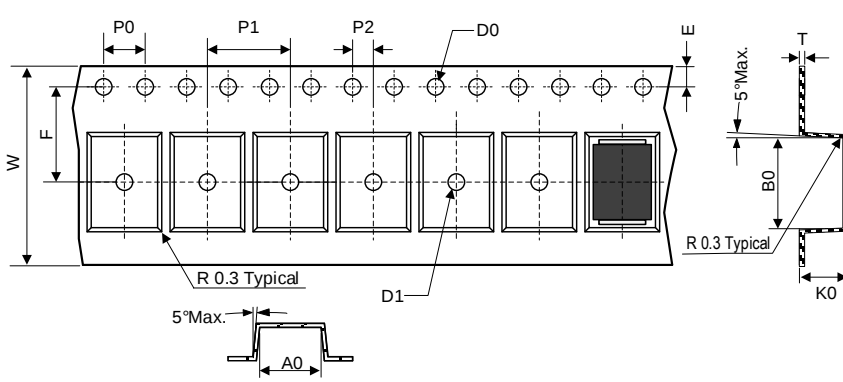
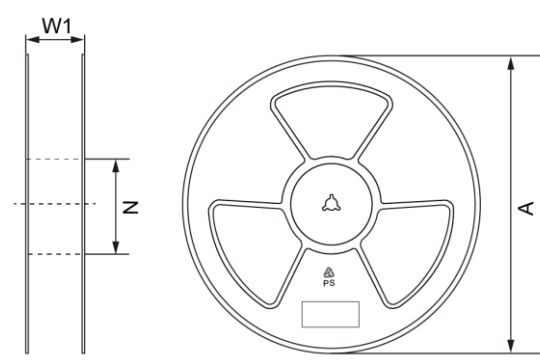
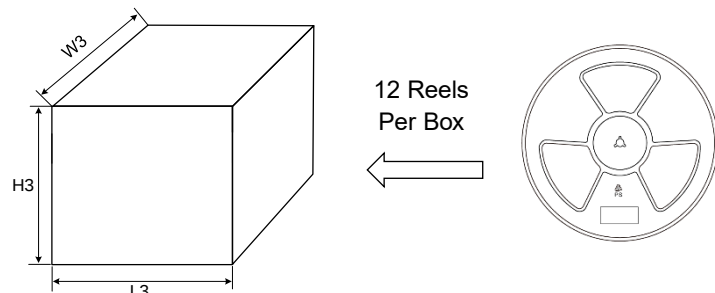
Device Ratings and Specifications (T_A=25°C unless otherwise noted)

Parameter	Symbol	Condition	Value	Unit
Nominal Varistor Voltage	V	@1mA	24.4-26.9	V
Maximum Allowable Continuous DC Voltage	V _{R(DC)}		22	V
Maximum Leakage Current	I _R	@ V _{R(DC)}	5	μ A
Maximum Peak Pulse Current	I _{PP}	8/20 μ s	1000	A
Short timeover-voltage		V _{DC} 5min	24	V
Clamping voltage	V _C	@IP 5A	35	V
Operating Temperature Range			-55 to 125	°C
Storage Temperature			-55 to +150	°C

A A-1 70 V without breakdown

Pulse Waveform - 8/20 μ s waveform

Lead-free Re-flow Solder Profile

Iron Soldering Profile

Product Dimensions


Dimensions	3025	
	Inch	Millimeter
L	0.322~0.346	8.20~8.80
W	0.236~0.259	6.00~6.60
H	0.141~0.161	3.60~4.10
S	0.061~0.068	1.55~1.75
E	0.098~0.106	2.50~2.70

Packaging Specification

16mm Tape 	<table> <tr> <th>Symbol</th><th>Dimension (mm)</th></tr> <tr> <td>W</td><td>16.00±0.30</td></tr> <tr> <td>P0</td><td>4.00±0.10</td></tr> <tr> <td>P1</td><td>12.00±0.10</td></tr> <tr> <td>P2</td><td>2.00±0.10</td></tr> <tr> <td>D0</td><td>Φ1.55±0.10</td></tr> <tr> <td>D1</td><td>Φ1.55±0.10</td></tr> <tr> <td>E</td><td>1.75±0.10</td></tr> <tr> <td>F</td><td>7.50±0.10</td></tr> <tr> <td>A0</td><td>6.70±0.10</td></tr> <tr> <td>B0</td><td>8.60±0.10</td></tr> <tr> <td>K0</td><td>4.20±0.10</td></tr> <tr> <td>T</td><td>0.40±0.05</td></tr> </table>	Symbol	Dimension (mm)	W	16.00±0.30	P0	4.00±0.10	P1	12.00±0.10	P2	2.00±0.10	D0	Φ1.55±0.10	D1	Φ1.55±0.10	E	1.75±0.10	F	7.50±0.10	A0	6.70±0.10	B0	8.60±0.10	K0	4.20±0.10	T	0.40±0.05
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	<table> <tr> <td>A</td><td>Φ330.0±2.0</td></tr> <tr> <td>N</td><td>100.0±3.0</td></tr> <tr> <td>W1</td><td>20.7±2.0</td></tr> <tr> <td colspan="2">13" Reel</td></tr> <tr> <td colspan="2">Quantity: 1000PCS/Reel</td></tr> </table>	A	Φ330.0±2.0	N	100.0±3.0	W1	20.7±2.0	13" Reel		Quantity: 1000PCS/Reel																	
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Specifications are subject to change without notice.