

CMS2822 Series**Descriptions 产品描述**

The CMS2822 Series are manufactured with encapsulated cylindrical varistor elements as small SMD packages. The products are 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).

These devices feature high energy absorption capabilities, high working temperature (125°C) and also fast response thus low clamping voltages. These characteristics make the devices the best replacement of DIP-MOV in many applications, especially with space limits and SMT installation requirements.

Features 产品特征

- Cylindrical varistor elements, encapsulated
- High energy absorption capability
- UL94V-0 flammability rating
- Excellent low leakage current <20μA
- Inherent Bi-directional Clamping
- SMD type Body size 2822
- Suitable for lead-free soldering
- RoHS compliant

**Apperance****Order Information 包装信息**

Size	Quantity	Reel Size
2822	4000	15 Inch

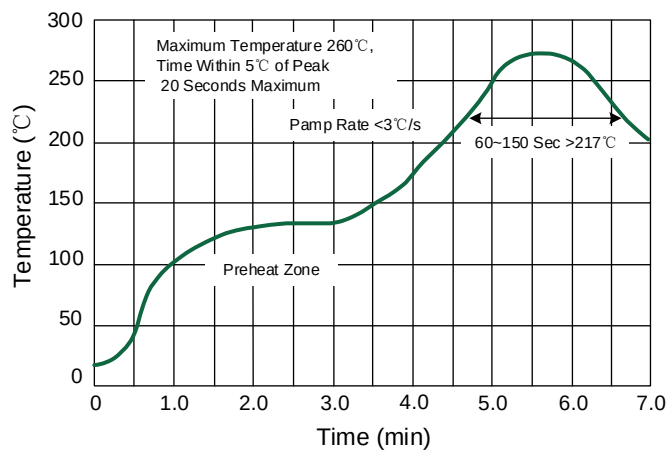
General Technical Data 技术参数

Parameter	Value
Maximum RMS operating voltage	130...395 V
Maximum DC operating voltage	170...510 V
Maximum surge current (8/20μs)	400...1200A
Maximum leakage current at V _{DC}	20μA
Operating temperature range	-40°C to +125 °C
Storage temperature	-40°C to +125 °C

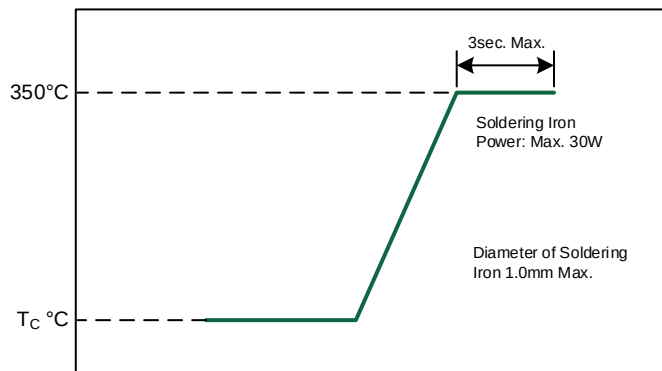
Device Ratings and Specifications 额定值和规格

型号 Part Number	最大持续电压 Maximum Continuous Voltage (V)		压敏电压 Nominal Varistor Voltage @1mA (V)	最大钳位电压 Clamping Voltage (Max. V)	最大钳位电流 Class Current (Max. A)	最大峰值电流 Maximum Peak Current 8/20μs (A)	能量 Energy (J) (2ms)	额定功率 Rated Power (mW)
	AC	DC	V _N	V _C	8/20μs I _C	1 Time	1 Time	
CMS2822V201P122	130	170	200[180-220]	340	10	1200	0.25	3
CMS2822V221P122	140	180	220[198-242]	360	10	1200	0.25	3.2
CMS2822V241P122	150	200	240[216-264]	395	10	1200	0.25	3.5
CMS2822V271P122	175	225	270[243-297]	455	10	1200	0.25	3.7
CMS2822V301P122	195	250	300[270-330]	500	10	1200	0.25	4
CMS2822V331P122	210	275	330[297-363]	550	10	1200	0.25	4.2
CMS2822V361P401	230	300	360[324-396]	595	10	400	0.25	4.5
CMS2822V391P401	250	320	390[351-429]	650	10	400	0.25	5
CMS2822V431P401	275	350	430[387-473]	710	10	400	0.25	5.5
CMS2822V471P401	300	385	470[423-517]	775	10	400	0.25	6
CMS2822V511P401	320	410	510[459-561]	845	10	400	0.25	6.5
CMS2822V561P401	350	450	560[504-616]	930	10	400	0.25	7
CMS2822V621P401	395	510	620[558-682]	1020	10	400	0.25	8

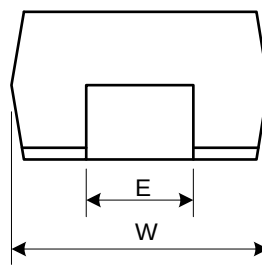
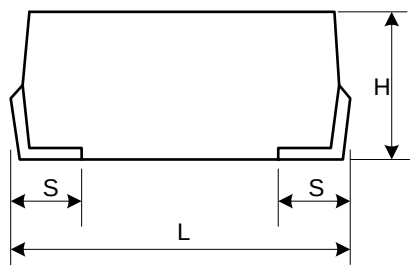
Lead-free Re-flow Solder Profile



Iron Soldering Profile



Product Dimensions 产品尺寸



Dimensions	2822	
	Inch	Millimeter
L	0.264~0.287	6.7~7.3
W	0.209~0.232	5.3~5.9
H	0.085~0.108	2.15~2.75
S	0.008~0.031	0.2~0.8
E	0.093~0.104	2.35~2.65

Storage 存储条件

- Storage temperature range (packaging conditions): -10℃~+40℃ RH 70% (Max.).
存储温度范围（包装情况下） -10℃~+40℃ RH 70% (最高.).
- The solderability of the external electrode may be deteriorated if packages are stored where they are exposed to high humidity. Package must be stored at 40℃ or less and 70% RH or less.
如果将包装存放在暴露的高湿度地方，则外部电极的可焊性可能会变差。包装必须储存在40℃或更低，RH为70%或更低。
- The solderability of the external electrode may be deteriorated if packages are stored where they are exposed to dust of harmful gas (e.g. HCl, sulfurous gas of H₂S).
如果将包装存放在暴露的有害气体（例如HCl，H₂S的含硫气体）以及粉尘地方，则外部电极的可焊性可能会变差。
- Packaging material may be deformed if package are stored where they are exposed to heat of direct sunlight.
如果包装材料存放在暴露的阳光直射高温下，包装材料可能会变形。
- Solderability shall be guaranteed for 12 months from the date of delivery on condition that they are stored at the environment specified in Clause 2. For those parts, which passed more than 12 months shall be checked solder-ability before use.
自交货之日起，可焊性应保证12个月，前提是储存在第2条规定的环境中。对于超过12个月的产品，应在使用前检查可焊性。

© Boarden Electronics Ltd.

Specifications are subject to change without notice.

Website: www.boarden.com.cn

Tel: 86-21-61401058

Fax: 86-21-61730538