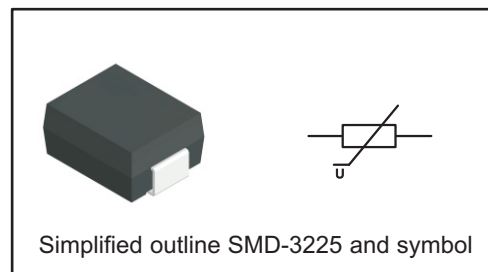


Surface-mount varistor device

## FEATURES

- Wide operating voltage (V1mA) range from 270V to 680V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no following-on current



## MECHANICAL DATA

- Case: SMD-3225
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.625g / 0.022oz

## Mechanical Requirements

Solderability	Min. 95% of The Terminal Should Be Covered With Solder Uniformly	Solder Temp: 265±5°C Immersed Time: 2±0.5Sec.
Resistance of soldering heat	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Solder Temp: 260±5°C
		Immersed Time: 10±1Sec.

## Environmental Requirements

High Temperature Storage	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Ambient Temp: 125±2°C Duration: 1000h		
Low Temperature Storage	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Ambient Temp: -40±2°C Duration: 1000h		
High Humidity Storage/Damp Heat	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Ambient Temp: 40±2°C 90-95% R.H. Duration: 1000h		
High Temperature Load	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Ambient temp: 85±2°C Duration: 1000h Load: Max. Allowable Voltage		
Damp Heat Load/ Humidity Load	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	1. Temperature : 40±2°C 2. Humidity : 90~95% RH 3. Rated working voltage applied 4. Time : 500±2 hours 5. Test after placing in ambient temperature for 24 hours.		
Temperature Cycle	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Step	Temperature	Period
		1	-50°C	30min
		2	Room Temp	15min
		3	125°C	30min
4	Room Temp	15min		
Operating Temperature Range	-40°C ~ +125°C	-40°C ~ +125°C		
Storage Temperature Range	-55°C ~ +125°C	-55°C ~ +125°C		



Characteristics at Ta = 25°C

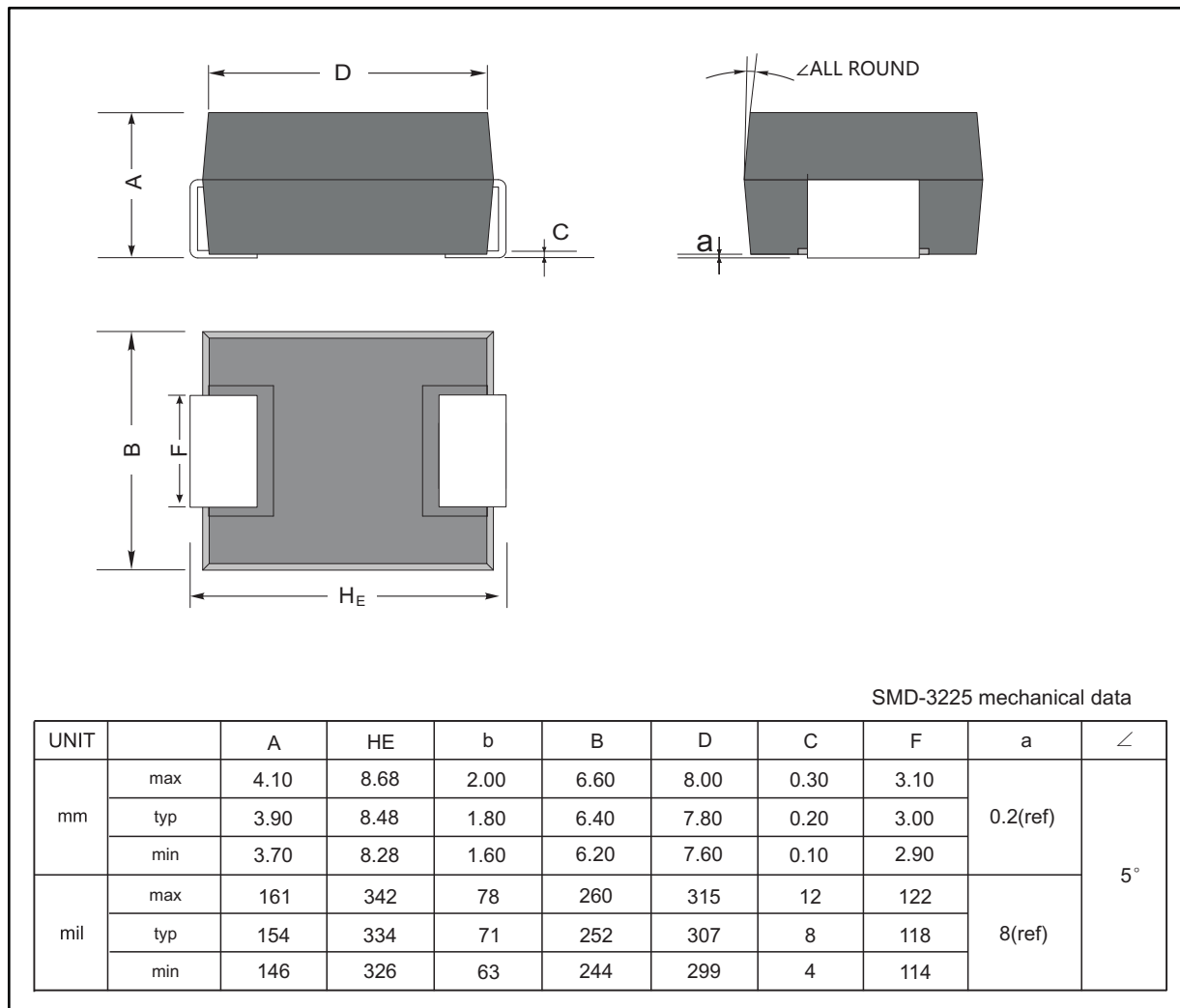
Type Number	Marking	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current	Maximum Energy	Rated Power	Typical Capacitance (Reference)
		V <sub>AC</sub>	V <sub>DC</sub>	V <sub>1mA</sub>	I <sub>T</sub>	V <sub>C</sub>				I(A)
		V	V	V	A	V				
3225S271KJ	3225S271KJ	175	225	270(243~297)	10	455	1750	24	0.25	185
3225S301KJ	3225S301KJ	190	250	300(270~330)	10	500	1750	26	0.25	165
3225S331KJ	3225S331KJ	210	275	330(297~363)	10	550	1750	28	0.25	150
3225S361KJ	3225S361KJ	230	300	360(324~396)	10	595	1750	32	0.25	140
3225S391KJ	3225S391KJ	250	320	390(351~429)	10	650	1750	35	0.25	130
3225S431KJ	3225S431KJ	275	350	430(387~473)	10	710	1750	40	0.25	115
3225S471KJ	3225S471KJ	300	385	470(423~517)	10	775	1750	42	0.25	105
3225S511KJ	3225S511KJ	320	415	510(459~561)	10	845	1750	45	0.25	100
3225S561KJ	3225S561KJ	350	460	560(504~616)	10	925	1750	49	0.25	90
3225S621KJ	3225S621KJ	385	505	620(558~682)	10	1025	1750	55	0.25	80
3225S681KJ	3225S681KJ	420	560	680(612~748)	10	1120	1750	60	0.25	75



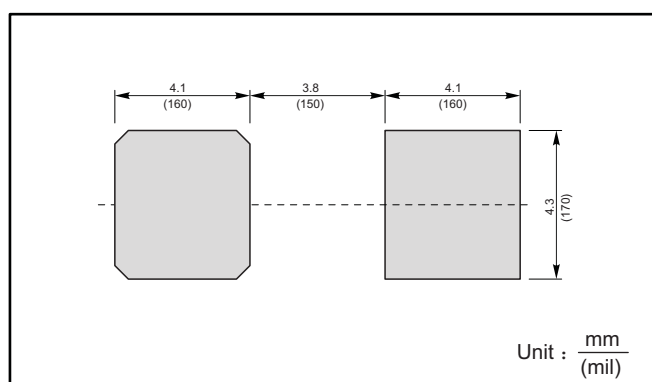
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMD-3225



### The recommended mounting pad size





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