

VGAH121031R650DP

(1210, 31Vdc, 1.7J, 300A, 1200pF, Sn Term)

Multilayer Chip Varistor Datasheet

BASIC SPECIFICATION

| | |
|-----------------------|----------------------|
| Case Size [EIA] | 1210 |
| Operating Temperature | -55 to +150°C |
| Grade | Automotive & General |
| Qualification | AEC-Q200 |
| Termination | Sn |
| RoHS | Yes |
| MSL Level | 1 |
| Packaging | T&R 7in (180mm) |
| Packaging Qty | 1000 pcs |



AEC-Q200
Qualified



RoHS
Compliant

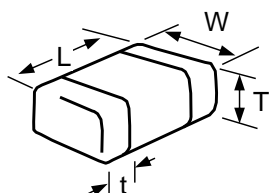


Click for
Online Data

ELECTRICAL CHARACTERISTICS

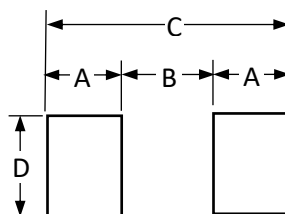
| | |
|---|------------|
| DC Working Voltage | 31 Vdc |
| AC Working Voltage | 25 Vac |
| Breakdown Voltage [1mA DC] | 39±10% V |
| Clamping Voltage [8x20µs] | 65V @ 2.5A |
| Max Leakage Current [Vdc, 25°C] | 15 µA |
| Transient Energy [10x1000µs] | 1.7 J |
| Load Dump Energy [x10] | 4.5 J |
| Peak Power [10x1000µs] | 1275 W |
| Peak Current Rating [8x20µs] | 300 A |
| Typical Capacitance [1kHz, 0.5Vrms, 25°C] | 1200 pF |
| Capacitance Tolerance | +100/-50% |
| Jump Start Voltage [5min] | 30 V |
| Power Dissipation | 0.05 W |

DIMENSIONS



| | mm | inches |
|---|-----------|-------------|
| L | 3.20±0.20 | 0.126±0.008 |
| W | 2.49±0.20 | 0.098±0.008 |
| T | 1.7 max | 0.067 max |
| t | 1.14 max | 0.045 max |

SOLDERING PAD



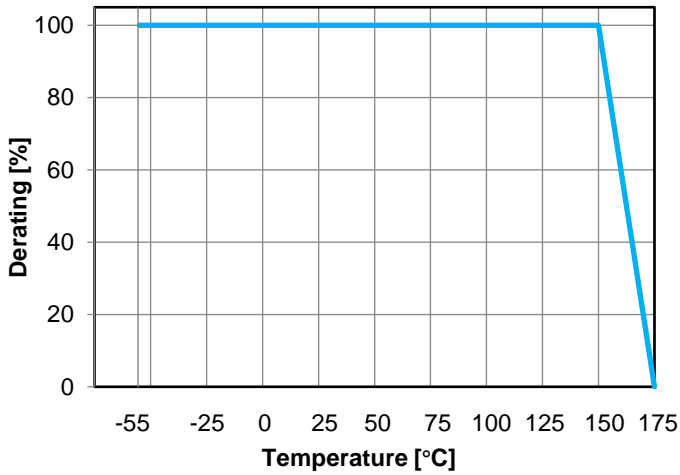
| | mm | inches |
|---|------|--------|
| A | 1.02 | 0.04 |
| B | 2.03 | 0.08 |
| C | 4.06 | 0.16 |
| D | 2.54 | 0.1 |

HOW TO ORDER

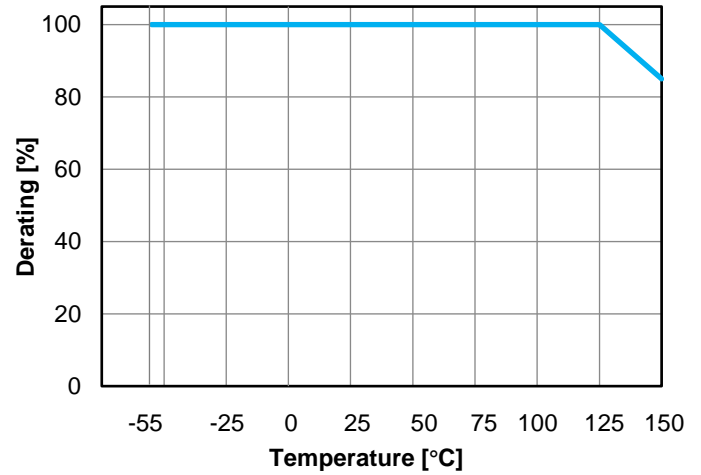
| | | | | | | |
|--|-------------|--------------------|------------------|---------------------|--|-------------|
| VGAH | 1210 | 31 | R | 650 | D | P |
| Varistor Glass Encapsulated 150°C | Case Size | Working Voltage | Energy Rating | Clamping Voltage | Packaging | Termination |
| | | 31 = 31 Vdc | R = 1.7J | 650 = 65V | D = 7" reel (1,000pcs) R = 7" reel (2,000pcs) T = 13" reel (10,000pcs) | P = Sn |

TYPICAL CHARACTERISTICS

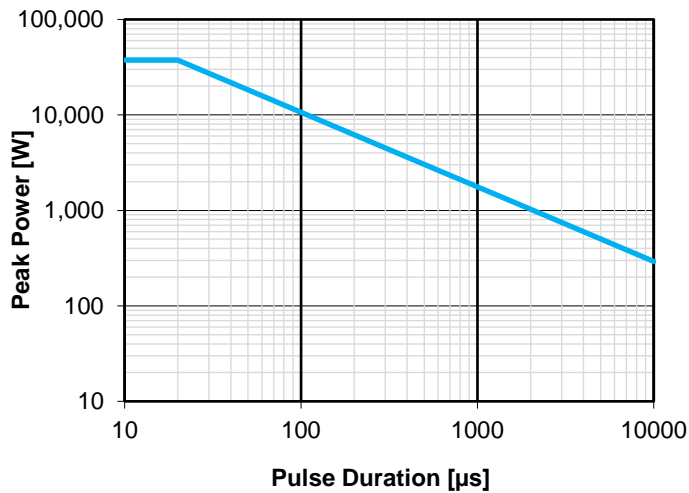
Temperature Derating (Energy, Current, Power)



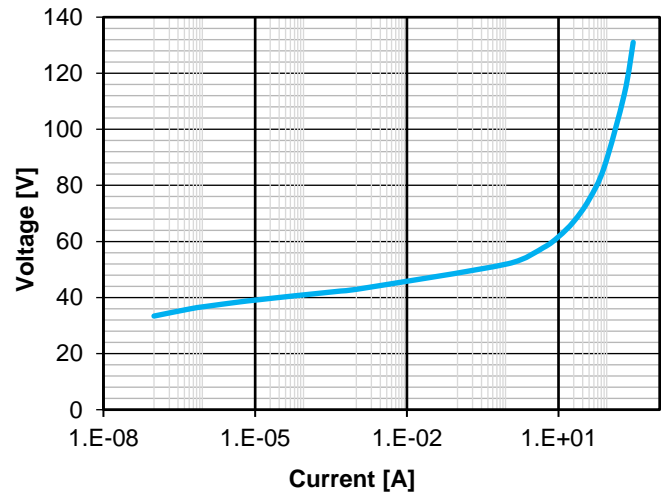
Temperature Derating (Working Voltage)



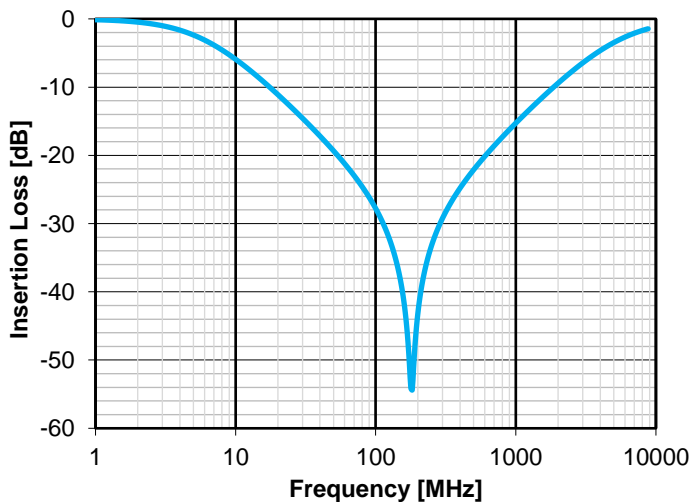
Power Derating



Voltage / Current



S21



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