光碁科技股份有限公司
CERAMATE TECHNICAL CO., LTD.

SPECIFICATIONS

PRODUCT： **VARISTOR**

TYPE： **GNR34S□□□K**

MODEL： **M**

CITATION：

REVISION： **B01**

TOTAL PAGES： **5** PAGE：**1/5**

RELEASED DATE： **Feb. 06, 2002**

REVISION HISTORY

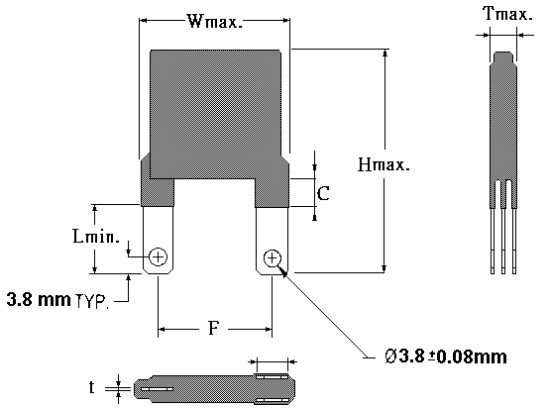
NO	REV. DATE	DCR NO.	DESCRIPTION OF CHANGE	REV.
1	Feb. 06,2002		NEW RELEASE	B01
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Approved by	Checked by	Edited by
Yu-Chang Huang	Cloud Chen	Andy Chiang

1. QUALITY SYSTEM APPROVAL

ISO9001 Certificate of approval No.97-HOU-AQ-1382

2. STRUCTURE

NO.	ITEM	DESCRIPTION
2.1	Main Material	Zinc Oxide
2.2	Coating Material	Epoxy Resin
2.3	Marking	GNR, Part number
2.4	Appearance	Without dirt and crack, marking should be clear
2.5	Dimensions	 Unit: mm

W(max.)	44.0
H(max.)	56.6
T(max.)	∗(1)
F	25.4± 0.5
T	0.5± 0.1
L(min.)	16.5
C(max.)	3.18
W1(max.)	7.0

∗(1) See Page 3, Dimensions Table

Part No.	$T_{max.}$
34S201K	7.8
34S221K	8.0
34S241K	8.2
34S271K	8.6
34S331K	9.0
34S361K	9.3
34S391K	9.6
34S431K	10.0
34S471K	10.5
34S511K	10.7
34S561K	11.1
34S621K	11.4
34S681K	11.9
34S751K	12.5
34S781K	12.7
34S821K	13.2
34S911K	14.0
34S951K	14.5
34S102K	15.0
34S112K	16.0

Unit:mm

3. ELECTRICAL CHARACTERISTICS

N0.	ITEM	PERFORMANCE	TEST METHODS
3.0	Standard Conditions		Unless otherwise specified, all tests are made under environmental conditions as given below: Temperature: 5～35℃ Relative humidity: 45～85 % RH
3.1	Maximum Allowable Voltage	AC : ＊**(2)** Vrms DC : ＊**(2)** V	Maximum continuous sine wave(RMS) or DC voltage which may be applied.
3.2	Varistor Voltage	V_{1mA} : ＊**(2)** V	Voltage across the varistor measured at C_{mA} DC.
3.3	Varistor Voltage Temperature Coefficient	0 ～ −0.05 %/℃	$\frac{V_{CmA}\text{ at }85℃ - V_{CmA}\text{ at }25℃}{V_{CmA}\text{ at }25℃} \times \frac{1}{60} \times 100$
3.4	Max. Clamping Voltage	＊**(2)** V at ＊**(2)** A	Peak voltage across the varistor with a specified peak impulse current of 8× 20 μs waveform.
3.5	Withstanding Surge Current	＊**(2)** A	The max. current within the varistor voltage change of less than ± 10% when one impulse current (8× 20 μs) applied.
			The max. current with a varistor voltage change of less than ± 10% when two times impulse current (8× 20 μs) are applied at intervals of 5 minutes.
3.6	Energy	＊**(2)** Joule	The max. energy absorbed with a varistor voltage change of less than ± 10% when one impulse(10 × 1000 μs) is applied.
3.7	Surge Life	＊**(2)** A	The max. current with a varistor voltage change of less than ± 10% when 10,000 times impulse current (8× 20 μs) are applied at intervals of 20 seconds at room temperature.

＊(2) See Page 5

PART NUMBER	MAXIMUM ALLOWABLE VOLTAGE		VARISTOR VOLTAGE	CLAMPING VOLTAGE (MAX.)		SURGE CURRENT (8/20 μs)		MAXIMUM ENERGY (10/1000 μs)	SURGE LIFE
	AC_{rms}(V)	DC(V)	(V)	(V)	Ip(A)	I_{tm}(A) 1 TIME	I_{tm}(A) 2 TIMES	W_{tm}(joule)	(A)
34S201K	130	170	185～225	340	300	40000	30000	310	500
34S221K	140	180	198～242	360				330	
34S241K	150	200	216～264	395				360	
34S271K	175	225	243～297	455				390	
34S331K	210	275	297～363	550				410	
34S361K	230	300	324～396	595				460	
34S391K	250	320	351～429	650				490	
34S431K	275	350	387～473	710				550	
34S471K	300	385	423～517	775				600	
34S511K	320	415	459～561	845				640	
34S561K	350	460	504～616	920				710	
34S621K	385	505	558～682	1025				800	
34S681K	420	560	612～748	1120				910	
34S751K	460	615	675～825	1240				980	
34S781K	485	640	702～858	1290				1020	
34S821K	510	670	738～902	1355				1100	
34S911K	550	745	819～1001	1500				1150	
34S951K	575	765	885～1045	1570				1200	
34S102K	625	825	900～1100	1650				1250	
34S112K	680	895	990～1210	1815				1350	