



SPECIFICATIONS

PRODUCT : **VARISTOR**

TYPE : **GNR34B□□□K**

MODEL :

CITATION :

REVISION : **B01**

TOTAL PAGES : **4**

PAGE : **1/4**

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				

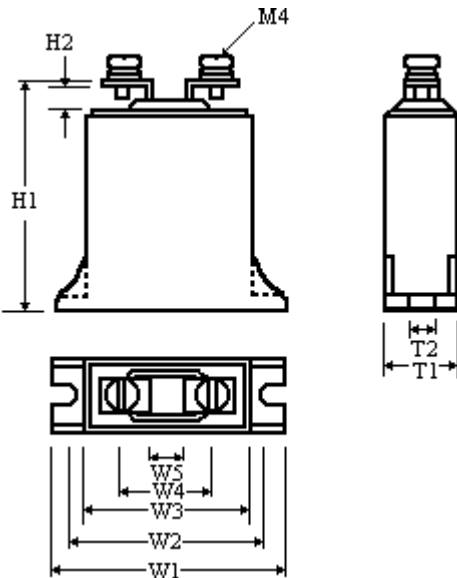
Approved by	Checked by	Edited by
Yu-Chang Huang	Cloud Chen	Andy Chiang

CERAMATE	TYPE	GNR34B□□□K	MODEL		PAGE	2/4
CITATION				DATE	Feb. 06, 2002	
SUBJECT	QUALITY APPROVAL and STRUCTURE			REV.	B01	

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	Package Material	Plastic																		
2.3	Marking	GNR, Part number																		
2.4	Appearance	Without dirt and crack, marking should be clear																		
2.5	Dimensions	 <table border="1" style="float: right; margin-top: 10px;"> <tr><td>H1</td><td>55.0</td></tr> <tr><td>H2</td><td>5.0</td></tr> <tr><td>T1</td><td>14.0</td></tr> <tr><td>T2</td><td>4.3</td></tr> <tr><td>W1</td><td>60.0</td></tr> <tr><td>W2</td><td>51.0± 0.5</td></tr> <tr><td>W3</td><td>40.0± 0.5</td></tr> <tr><td>W4</td><td>24.0</td></tr> <tr><td>W5</td><td>12.0</td></tr> </table> <p style="text-align: right;">Unit: mm</p>	H1	55.0	H2	5.0	T1	14.0	T2	4.3	W1	60.0	W2	51.0± 0.5	W3	40.0± 0.5	W4	24.0	W5	12.0
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SUBJECT	ELECTRICAL CHARACTERISTICS			REV.	B01	

3. ELECTRICAL CHARACTERISTICS

NO.	ITEM	PERFORMANCE	TEST METHODS
3.0	Standard Conditions		Unless otherwise specified, all tests are made under environmental conditions as given below: Temperature: 5~35°C Relative humidity: 45~85 % RH
3.1	Maximum Allowable Voltage	AC : * Vrms DC : * V	Maximum continuous sine wave(RMS) or DC voltage which may be applied.
3.2	Varistor Voltage	V _{1mA} : * V	Voltage across the varistor measured at C _{mA} DC.
3.3	Varistor Voltage Temperature Coefficient	0 ~ -0.05 %/°C	$\frac{V_{CmA} \text{ at } 85^{\circ}\text{C} - V_{CmA} \text{ at } 25^{\circ}\text{C}}{V_{CmA} \text{ at } 25^{\circ}\text{C}} \times \frac{1}{60} \times 100$
3.4	Max. Clamping Voltage	* V at * A	Peak voltage across the varistor with a specified peak impulse current of 8x 20 μs waveform.
3.5	Rated Power	* W	Maximum 50~60Hz power which may be loaded for 1,000 hrs at 85± 2°C with $\Delta V_{CmA} / V_{CmA} \leq \pm 10\%$.
3.6	Withstanding Surge Current	* A	The max. current within the varistor voltage change of less than ± 10% when one impulse current (8x 20 μs) applied.
			The max. current with a varistor voltage change of less than ± 10% when two times impulse current (8x 20 μs) are applied at intervals of 5 minutes.
3.7	Energy	* Joule	The max. energy absorbed with a varistor voltage change of less than ± 10% when one impulse(2ms) is applied.
3.8	Typical Capacitance	* pF	Capacitance shall be measured at 1 kHz± 10%, 1 Vrms max. 0V bias and 20± 2°C

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SUBJECT

ELECTRICAL CHARACTERISTICS

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PART NUMBER	MAXIMUM ALLOWABLE VOLTAGE		VARISTOR VOLTAGE (V)	CLAMPING VOLTAGE (MAX.)		RATED WATTAGE (MAX.) (W)	SURGE CURRENT (8/20 μ s)		MAXIMUM ENERGY (2ms) W_{tm} (joule)	Typical Capacitance pF
	AC _{rms} (V)	DC(V)		(V)	Ip(A)		I_{tm} (A)			
			1 TIME			2 TIMES				
34B330K	20	26	30~36	65	60	0.3	10000	7000	60	39000
34B390K	25	31	35~43	77					75	29000
34B470K	30	38	42~52	93					95	25000
34B560K	35	45	50~62	110					110	22000
34B680K	40	56	61~75	135					125	19500
34B820K	50	65	74~90	135					125	16500
34B101K	60	85	90~110	165	300	1.4	25000	20000	175	13500
34B121K	75	100	108~132	200					200	11000
34B151K	95	125	135~165	250					235	9000
34B181K	115	150	162~198	300					280	7500
34B201K	130	170	185~225	340					310	6800
34B221K	140	180	198~242	360					330	6200
34B241K	150	200	216~264	395			360	5700		
34B271K	175	225	247~303	455			390	5000		
34B301K	190	250	270~330	505			410	4600		
34B331K	210	275	297~363	545			440	4100		
34B361K	230	300	324~396	595			460	3800		
34B391K	250	320	351~429	650			490	3500		
34B431K	275	350	387~473	710			550	3200		
34B471K	300	385	423~517	775			600	2900		
34B511K	320	410	459~561	845			640	2700		
34B561K	350	460	504~616	920			710	2400		
34B621K	385	505	558~682	1025			800	2200		
34B681K	420	560	612~748	1120			910	2000		
34B751K	460	615	675~825	1240	980	1800				
34B781K	485	640	702~858	1290	1000	1750				
34B821K	510	670	738~902	1355	1060	1650				
34B911K	550	745	819~1001	1500	1100	1500				
34B951K	575	765	855~1045	1570	1140	1430				
34B102K	625	825	900~1100	1650	1180	1360				
34B112K	680	895	990~1210	1815	1270	1250				
34B122K	750	990	1155~1320	1980	1350	1150				
34B142K	880	1140	1310~1540	2310	1200	1000				
34B162K	1000	1280	1700~1980	2640	1300	880				