

# MURATA High Voltage Ceramic Chip Capacitors



**GRM SERIES HIGH VOLTAGE MULTILAYER SMD CERAMIC CHIP CAPACITORS**



This product is RoHS compliant.

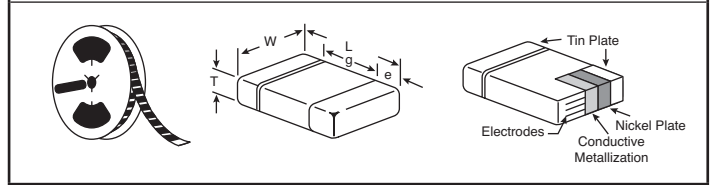
**Features:**

- Lead Free
- 250V - 3.15KV
- Meets special Hi-Voltage needs
- Base metal and lead-free technology
- Operating Temperature: -55°C to +125°C



RoHS Compliant

**DIMENSIONS: mm**



Application Selection Guide				
Series		GRM	GR4	GA3
Modem	DAA Modem	•		•
	xDSL Modem	•		•
Network	Set Top Box	•	•	•
	LAN, Router, HUB, Switch, etc.	•	•	
Flat Panel Display	LCD Back Light Inverter	•		
	PDP Panel	•		
Power Supply	Switching Power Supply, AC Adapter	•	•	•
	DC/DC Converter	•	•	
Lighting	Battery Charger for Cellphone	•		•
	Electric Ballast for Fluorescent Lamp	•		•
	Electric Ballast for CFL	•		•

Part No.	L	W	T (max)	e	g min.
GRM31B	3.2 ±0.2	1.6 ±0.2	1.25 +0,-0.3	0.3 min.	1.2
GRM31C	3.2 ±0.2	1.6 ±0.2	1.6 +0.2		
GRM32B	3.2 ±0.2	1.6 ±0.2	1.25 +0,-0.3		
GRM32Q	3.2 ±0.3	2.5 ±0.2	1.5 +0,-0.3		2.2
GRM32D	3.2 ±0.3	2.5 ±0.2	2 +0,-0.3		
GRM42D	4.5 ±0.4	2.0 ±0.2	2 +0,-0.3		
GRM43D	4.5 ±0.4	3.2 ±0.3	2 +0,-0.3	2.5	
GRM43E	4.5 ±0.4	3.2 ±0.3	2.5 +0,-0.3		
GRM43Q	4.5 ±0.4	3.2 ±0.3	1.5 +0,-0.3		
GRM55D	5.7 ±0.4	5 ±0.4	2 +0,-0.3		

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Murata Part No.	Value (µF)	Vdc (V)	Tolerance ±	Price Each				Reel Qty.	Price Per Piece
					1	50	100	500		
<b>1206 Case Size</b>										
81-GRM31BR73A471KW01	GRM31BR73A471KW01L	470pF	1KV	10%	.43	.30	.223	.142	3000	.077
81-GRM31BR73A511KW01	GRM31BR73A511KW01L	510pF	1KV	10%	.31	.181	.163	.139	3000	.076
81-GRM31BR73A102KW01	GRM31BR73A102KW01L	1000pF	1KV	10%	.42	.241	.201	.129	3000	.073
81-GRM31BR72J102KW01	GRM31BR72J102KW01L	1000pF	630	10%	.40	.206	.163	.094	3000	.057
81-GRM31BR72J152KW01	GRM31BR72J152KW01L	1500pF	630	10%	.19	.135	.121	.103	3000	.062
81-GRM31BR73A152KW01	GRM31BR73A152KW01L	1500pF	1KV	10%	.43	.232	.184	.105	3000	.064
81-GRM31BR72J222KW01	GRM31BR72J222KW01L	2200pF	630	10%	.20	.142	.128	.109	3000	.066
81-GRM31BR73A222KW01	GRM31BR73A222KW01L	2200pF	1KV	10%	.43	.248	.207	.132	3000	.075
81-GRM31BR72J332KW01	GRM31BR72J332KW01L	3300pF	630	10%	.19	.135	.121	.103	3000	.062
81-GRM31BR72J472KW01	GRM31BR72J472KW01L	4700pF	630	10%	.50	.257	.204	.117	3000	.071
81-GRM31BR73A472KW01	GRM31BR73A472KW01L	4700pF	1KV	10%	.45	.257	.214	.137	3000	.077
81-GRM31BR72J682KW01	GRM31BR72J682KW01L	6800pF	630	10%	.23	.163	.147	.126	3000	.076
81-GRM31BR72J103KW01	GRM31BR72J103KW01L	0.01	630	10%	.45	.232	.184	.105	3000	.064
81-GRM31BR72E153KW01	GRM31BR72E153KW01L	0.015	250	10%	.45	.258	.215	.137	3000	.078
81-GRM31BR72E223KW01	GRM31BR72E223KW01L	0.022	250	10%	.45	.258	.215	.137	3000	.078
81-GRM31CR72J153KW03	GRM31CR72J153KW03L	0.015	630	10%	.22	.154	.138	.118	4000	.071
81-GRM31CR72E473KW03	GRM31CR72E473KW03L	0.047	250	10%	.56	.287	.228	.131	2000	.079
81-GRM31CR72E104KW03	GRM31CR72E104KW03L	0.1	250	10%	.21	.15	.134	.115	2000	.081
81-GRM31R72E333KW03L	GRM31CR72E333KW03L	0.033	250	10%	.45	.258	.215	.137	2000	.078
<b>1210 Case Size</b>										
81-GRM32BR72J102KW01	GRM32BR72J102KW01L	1000pF	630	10%	.67	.276	.242	.211	3000	.115
81-GRM32QR73A682KW01	GRM32QR73A682KW01L	6800pF	1KV	10%	.47	.44	.357	.252	1000	.201
81-GRM32QR73A103KW01	GRM32QR73A103KW01L	0.01	1KV	10%	.47	.331	.308	.25	2000	.133
81-GRM32DR73A153KL	GRM32DR73A153KW01L	0.015	1KV	10%	.78	.47	.412	.294	2000	.157
81-GRM32DR73A223KW01	GRM32DR73A223KW01L	0.022	1KV	10%	.76	.44	.394	.336	1000	.243
81-GRM32QR72J223KW01	GRM32QR72J223KW01L	0.022	630	10%	.33	.227	.211	.185	2000	.117
81-GRM32DR72J333KW01	GRM32DR72J333KW01L	0.033	630	10%	.34	.241	.223	.196	2000	.117
81-GRM32QR72E683KW01	GRM32QR72E683KW01L	0.068	250	10%	.31	.216	.20	.175	2000	.111
81-GRM32DR72E104KW01	GRM32DR72E104KW01L	0.1	250	10%	.54	.307	.256	.163	1000	.097
81-GRM32DR72E224KW01	GRM32DR72E224KW01L	0.22	250	10%	.68	.387	.322	.206	1000	.123
<b>1808 Case Size</b>										
81-GRM421X3F100JY02L	GRM42D1X3F100JY02L	10pF	3.15KV	5%	1.09	.63	.565	.482	2000	.292
81-GRM421X3F120JY02L	GRM42D1X3F120JY02L	12pF	3.15KV	5%	1.09	.63	.565	.482	2000	.292
81-GRM421X3F150JY02L	GRM42D1X3F150JY02L	15pF	3.15KV	5%	1.09	.63	.565	.482	2000	.292
81-GRM421X3F180JY02L	GRM42D1X3F180JY02L	18pF	3.15KV	5%	1.19	.688	.617	.526	2000	.319
81-GRM421X3F220JY02L	GRM42D1X3F220JY02L	22pF	3.15KV	5%	1.19	.688	.617	.526	2000	.319
81-GRM421X3F270JY02L	GRM42D1X3F270JY02L	27pF	3.15KV	5%	1.09	.63	.565	.482	2000	.292
81-GRM421X3F330JY02L	GRM42D1X3F330JY02L	33pF	3.15KV	5%	1.25	.725	.65	.554	2000	.336
81-GRM421X3F560JY02L	GRM42D1X3F560JY02L	56pF	3.15KV	5%	1.09	.63	.565	.482	2000	.292
81-GRM421X3F680JY02L	GRM42D1X3F680JY02L	68pF	3.15KV	5%	1.09	.63	.565	.482	2000	.292
81-GRM421X3F820JY02L	GRM42D1X3F820JY02L	82pF	3.15KV	5%	.85	.541	.487	.392	2000	.203
<b>1812 Case Size</b>										
81-GRM43DR73A103KW21	GRM43DR73A103KW21L	0.01	1KV	10%	1.08	.75	.661	.50	1000	.289
81-GRM43QR73A223KW1L	GRM43QR73A223KW01L	0.022	1KV	10%	1.34	.777	.697	.594	1000	.43
81-GRM43DR73A333KW01	GRM43DR73A333KW01L	0.033	1KV	10%	1.28	.739	.662	.565	1000	.408
81-GRM43DR73A473KW01	GRM43DR73A473KW01L	0.047	1KV	10%	1.34	.774	.694	.592	1000	.428
81-GRM43QR72J683KW01	GRM43QR72J683KW01L	0.068	630	10%	.59	.428	.395	.342	1000	.224
81-GRM43DR72J104KW01	GRM43DR72J104KW01L	0.1	630	10%	1.01	.67	.53	.378	1000	.206
81-GRM43R72E154KW01L	GRM43QR72E154KW01L	0.15	250	10%	.63	.453	.418	.362	1000	.223
81-GRM43DR72E334KW01	GRM43DR72E334KW01L	0.33	250	10%	.84	.57	.485	.391	1000	.243
81-GRM43DR72E474KW01	GRM43DR72E474KW01L	0.47	250	10%	.99	.67	.571	.46	1000	.27
<b>2220 Case Size</b>										
81-GRM55DR73A104KW01	GRM55DR73A104KW01L	0.1	1KV	10%	1.40	.948	.86	.698	1000	.387
81-GRM55DR72J154KL	GRM55DR72J154KW01L	0.15	630	10%	1.07	.803	.763	.616	1000	.378
81-GRM55DR72J224KW01	GRM55DR72J224KW01L	0.22	630	10%	1.06	.798	.758	.611	1000	.426
81-GRM55DR72E334KW01	GRM55DR72E334KW01L	0.33	250	10%	1.07	.803	.763	.616	1000	.378
81-GRM55DR72E474KW01	GRM55DR72E474KW01L	0.47	250	10%	1.40	.942	.855	.694	1000	.384
81-GRM55RR72E105K	GRM55DR72E105KW01L	1.0	250	10%	1.26	.908	.823	.68	1000	.378