

MURATA Automotive Capacitors



GCJ SERIES MEDIUM VOLTAGE SOFT TERMINATION TYPE

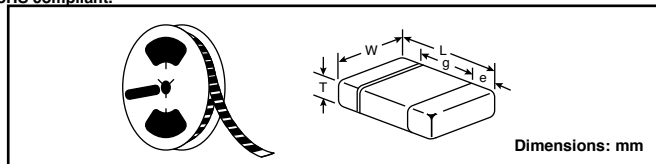
Committed to creating a low-carbon world, the automotive industry—as part of its responsibility to people and the planet—is rapidly computerizing and electrifying the vehicles produced to improve environmental compatibility. Murata's highly reliable electronic components, which take advantage of the heat resistance ceramics offer, help develop electronic control technology for vehicle systems and integrate electronics into onboard systems. Featuring low loss and highly reliable connection, our monolithic ceramic capacitors for high-power applications make it possible to downsize inverters and electrify ancillary units in electric and hybrid vehicles to achieve greater energy savings.

Features:

- The GCJ series meet AEC-Q200 requirements.
- Improve the endurance against Board Bending Stress.
- Reduce the board bending stress by the conductive polymer termination.
- Use the GCJ31 type with flow or reflow soldering, and other types with reflow soldering only.

Applications:

- Automotive electronic equipment (Power-train, safety equipment)



Dimensions: mm

Part Number	Dimensions: mm				
	L	W	T	e	g min.
GCJ188	1.6 ±0.2	0.8 ±0.1	0.8 ±0.1	0.2 to 0.5	0.5
GCJ216	2.0 ±0.3	1.25 ±0.2	0.6 ±0.1	0.2 to 0.7	0.7
GCJ219	2.0 ±0.3	1.25 ±0.2	0.85 ±0.1	0.2 to 0.7	0.7
GCJ21A	2.0 ±0.2	1.25 ±0.2	1.0 ±0.0-0.3	0.3 min.	0.7
GCJ21B	2.0 ±0.2	1.25 ±0.2	1.25 ±0.2	0.3 min.	0.7
GCJ31C	2.0 ±0.3	1.6 ±0.2	1.6 ±0.1	0.3 to 1.0	1.5
GCJ31M	2.0 ±0.3	1.6 ±0.3	1.15 ±0.2	0.3 to 1.0	1.5
GCJ31B	3.2 ±0.2	1.6 ±0.2	1.25 ±0.0-0.3	0.3 min.	1.2

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Murata Part No.	Value (pF)	Volt (DC)	Temperature Coefficient	Tolerance	Price Each				Reel Qty.	Price Each
						1	50	100	500		
0603 Case Size											
81-GCJ188R71C104KA1D	GCJ188R71C104KA01D	0.1µF	16	X7R	± 10%	.09	.066	.059	.051	4000	.031
81-GCJ188R71C474KA2D	GCJ188R71C474KA12D	0.47µF	16	X7R	± 10%	.14	.10	.09	.077	4000	.046
81-GCJ188R71E224KA2D	GCJ188R71E224KA12D	0.22µF	25	X7R	± 10%	.14	.097	.087	.075	4000	.045
81-GCJ188R71H102KA1D	GCJ188R71H102KA01D	1,000	50	X7R	± 10%	.09	.061	.055	.047	4000	.028
81-GCJ188R71H152KA1D	GCJ188R71H152KA01D	1,500	50	X7R	± 10%	.09	.061	.055	.047	4000	.028
81-GCJ188R71H222KA1D	GCJ188R71H222KA01D	2,200	50	X7R	± 10%	.09	.061	.055	.047	4000	.028
81-GCJ188R71H332KA1D	GCJ188R71H332KA01D	3,300	50	X7R	± 10%	.09	.061	.055	.047	4000	.028
81-GCJ188R71H472KA1D	GCJ188R71H472KA01D	4,700	50	X7R	± 10%	.09	.061	.055	.047	4000	.028
81-GCJ188R71H682KA1D	GCJ188R71H682KA01D	6,800	50	X7R	± 10%	.09	.061	.055	.047	4000	.028
81-GCJ188R71H103KA1D	GCJ188R71H103KA01D	10,000	50	X7R	± 10%	.09	.062	.055	.047	4000	.029
81-GCJ188R71H153KA1D	GCJ188R71H153KA01D	15,000	50	X7R	± 10%	.10	.071	.063	.054	4000	.033
81-GCJ188R71H223KA1D	GCJ188R71H223KA01D	22,000	50	X7R	± 10%	.10	.071	.063	.054	4000	.033
81-GCJ188R71H333KA2D	GCJ188R71H333KA12D	33,000	50	X7R	± 10%	.10	.072	.065	.055	4000	.033
81-GCJ188R71H473KA2D	GCJ188R71H473KA12D	47,000	50	X7R	± 10%	.11	.078	.07	.06	4000	.036
81-GCJ188R71H683KA2D	GCJ188R71H683KA12D	68,000	50	X7R	± 10%	.11	.079	.071	.061	4000	.037
81-GCJ188R71H104KA2D	GCJ188R71H104KA12D	0.1µF	50	X7R	± 10%	.11	.079	.071	.061	4000	.037
81-GCJ188R72A102KA1D	GCJ188R72A102KA01D	1,000	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A152KA1D	GCJ188R72A152KA01D	1,500	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A222KA1D	GCJ188R72A222KA01D	2,200	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A332KA1D	GCJ188R72A332KA01D	3,300	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A472KA1D	GCJ188R72A472KA01D	4,700	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A682KA1D	GCJ188R72A682KA01D	6,800	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A103KA1D	GCJ188R72A103KA01D	10,000	100	X7R	± 10%	.10	.068	.061	.052	4000	.032
81-GCJ188R72A153KA1D	GCJ188R72A153KA01D	15,000	100	X7R	± 10%	.12	.083	.074	.064	4000	.039
81-GCJ188R72A223KA1D	GCJ188R72A223KA01D	22,000	100	X7R	± 10%	.12	.083	.074	.064	4000	.039
0805 Case Size											
81-GCJ219R71C105KA1D	GCJ219R71C105KA01D	0.1µF	16	X7R	± 10%	.16	.116	.104	.089	4000	.054
81-GCJ21BR71C225KA3L	GCJ21BR71C225KA13L	2.2µF	16	X7R	± 10%	.57	.324	.27	.172	3000	.097
81-GCJ21BR71E105KA2L	GCJ21BR71E105KA12L	1µF	25	X7R	± 10%	.20	.144	.129	.111	3000	.067
81-GCJ216R71H102KA1D	GCJ216R71H102KA01D	1,000	50	X7R	± 10%	.11	.076	.068	.058	4000	.035
81-GCJ216R71H152KA1D	GCJ216R71H152KA01D	1,500	50	X7R	± 10%	.11	.076	.069	.059	4000	.035
81-GCJ216R71H222KA1D	GCJ216R71H222KA01D	2,200	50	X7R	± 10%	.11	.077	.069	.059	4000	.036
81-GCJ216R71H332KA1D	GCJ216R71H332KA01D	3,300	50	X7R	± 10%	.11	.077	.069	.059	4000	.036
81-GCJ216R71H472KA1D	GCJ216R71H472KA01D	4,700	50	X7R	± 10%	.11	.077	.069	.059	4000	.036
81-GCJ216R71H682KA1D	GCJ216R71H682KA01D	6,800	50	X7R	± 10%	.12	.082	.074	.063	4000	.038
81-GCJ216R71H103KA1D	GCJ216R71H103KA01D	10,000	50	X7R	± 10%	.11	.076	.069	.059	4000	.035
81-GCJ216R71H153KA1D	GCJ216R71H153KA01D	15,000	50	X7R	± 10%	.12	.082	.073	.063	4000	.038
81-GCJ216R71H223KA1D	GCJ216R71H223KA01D	22,000	50	X7R	± 10%	.12	.085	.076	.065	4000	.039
81-GCJ219R71H333KA1D	GCJ219R71H333KA01D	33,000	50	X7R	± 10%	.13	.094	.085	.072	4000	.044
81-GCJ21BR71H473KA1L	GCJ21BR71H473KA01L	47,000	50	X7R	± 10%	.13	.094	.085	.072	3000	.044
81-GCJ21BR71H683KA1L	GCJ21BR71H683KA01L	68,000	50	X7R	± 10%	.14	.098	.088	.075	3000	.046
81-GCJ21BR71H104KA1L	GCJ21BR71H104KA01L	0.1µF	50	X7R	± 10%	.14	.098	.088	.075	3000	.046
81-GCJ21BR71H224KA1L	GCJ21BR71H224KA01L	0.22µF	50	X7R	± 10%	.22	.156	.14	.12	3000	.072
81-GCJ21BR71H474KA2L	GCJ21BR71H474KA12L	0.47µF	50	X7R	± 10%	.56	.321	.267	.171	3000	.096
81-GCJ216R72A102KA1D	GCJ216R72A102KA01D	1,000	100	X7R	± 10%	.14	.101	.09	.077	4000	.047
81-GCJ216R72A152KA1D	GCJ216R72A152KA01D	1,500	100	X7R	± 10%	.14	.101	.09	.077	4000	.047
81-GCJ216R72A222KA1D	GCJ216R72A222KA01D	2,200	100	X7R	± 10%	.14	.101	.09	.077	4000	.047
81-GCJ216R72A332KA1D	GCJ216R72A332KA01D	3,300	100	X7R	± 10%	.14	.101	.09	.077	4000	.047
81-GCJ216R72A472KA1D	GCJ216R72A472KA01D	4,700	100	X7R	± 10%	.14	.101	.09	.077	4000	.047
81-GCJ216R72A682KA1D	GCJ216R72A682KA01D	6,800	100	X7R	± 10%	.15	.103	.092	.079	4000	.048
81-GCJ216R72A103KA1D	GCJ216R72A103KA01D	10,000	100	X7R	± 10%	.14	.099	.089	.076	4000	.046
81-GCJ216R72A153KA1D	GCJ216R72A153KA01D	15,000	100	X7R	± 10%	.17	.118	.106	.091	4000	.055
81-GCJ216R72A223KA1D	GCJ216R72A223KA01D	22,000	100	X7R	± 10%	.17	.12	.107	.092	4000	.055
81-GCJ219R72A333KA1D	GCJ219R72A333KA01D	33,000	100	X7R	± 10%	.17	.124	.111	.095	4000	.057
81-GCJ21BR72A473KA1L	GCJ21BR72A473KA01L	47,000	100	X7R	± 10%	.17	.124	.111	.095	3000	.057
81-GCJ21BR72A683KA1L	GCJ21BR72A683KA01L	68,000	100	X7R	± 10%	.19	.131	.118	.101	3000	.061
81-GCJ21BR72A104KA1L	GCJ21BR72A104KA01L	0.1µF	100	X7R	± 10%	.18	.129	.116	.099	3000	.06
81-GCJ21AR72E102KX1D	GCJ21AR72E102KXJ1D	1,000	250	X7R	± 10%	.13	.089	.08	.069	4000	.041
81-GCJ21AR72E152KX1D	GCJ21AR72E152KXJ1D	1,500	250	X7R	± 10%	.14	.096	.086	.073	4000	.044
81-GCJ21AR72E222KX1D	GCJ21AR72E222KXJ1D	2,200	250	X7R	± 10%	.14	.096	.086	.073	4000	.044
81-GCJ21AR72E332KX1D	GCJ21AR72E332KXJ1D	3,300	250	X7R	± 10%	.14	.096	.086	.073	4000	.044
81-GCJ21AR72E472KX1D	GCJ21AR72E472KXJ1D	4,700	250	X7R	± 10%	.14	.096	.086	.073	4000	.044
81-GCJ21AR72E682KX1D	GCJ21AR72E682KXJ1D	6,800	250	X7R	± 10%	.14	.096	.086	.073	4000	.044
81-GCJ21BR72E103KX3L	GCJ21BR72E103KXJ3L	10,000	250	X7R	± 10%	.14	.096	.086	.073	3000	.044
1206 Case Size											
81-GCJ31CR71A106KA3L	GCJ31CR71A106KA13L	10µF	10	X7R	± 10%	.81	.488	.427	.305	2000	.162
81-GCJ31CR71E475KA2L	GCJ31CR71E475KA12L	4.7µF	25	X7R	± 10%	.74	.444	.388	.277	2000	.148
81-GCJ31MR71H105KA2L	GCJ31MR71H105KA12L	1µF	50	X7R	± 10%	.70	.402	.335	.214	3000	.121
81-GCJ31CR71H225KA2L	GCJ31CR71H225KA12L	2.2µF	50	X7R	± 10%	.61	.368	.322	.23	2000	.123
81-GCJ31MR72A224KA1L	GCJ31MR72A224KA01L	0.22µF	100	X7R	± 10%	.66	.378	.315	.201	3000	.113
81-GCJ31BR72E153KX1L	GCJ31BR72E153KXJ1L	15,000	250	X7R	± 10%	.36	.251	.233	.204	3000	.115
81-GCJ31BR72E223KX1L	GCJ31BR72E223KXJ1L	22,000	250	X7R	± 10%	.36	.251	.233	.204	3000	.115
81-GCJ31CR72E333KX3L	GCJ31CR72E333KXJ3L	33,000	250	X7R	± 10%	.36	.251	.233	.204	2000	.129
81-GCJ31CR72E473KX3L	GCJ31CR72E473KXJ3L	47,000	250	X7R	± 10%	.36	.251	.233	.204	2000	.129
81-GCJ31BR72J102KX1L	GCJ31BR72J102KXJ1L	1,000	630	X7R	± 10%	.58	.334	.278	.178	3000	.10