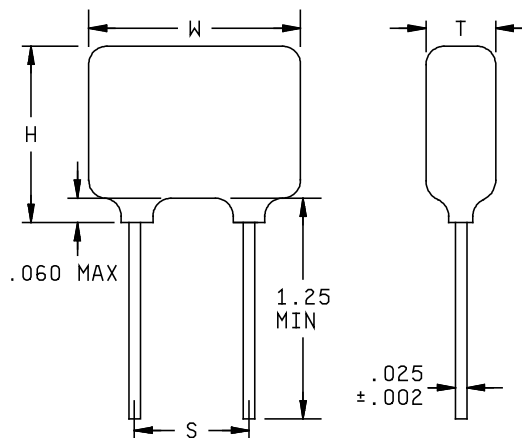


PERFORMANCE SPECIFICATION SHEET

CAPACITOR, CERAMIC, MULTILAYER, HIGH VOLTAGE, 2,000 V DC, STYLE HV02

This specification sheet is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and [MIL-PRF-49467](#).



Case code	Sizes (max.)			Lead spacing
	Width (W)	Height (H)	Thickness (T)	± .030 (S)
A	.250	.220	.200	.170
B	.320	.280	.250	.220
C	.370	.300	.250	.275
D	.470	.400	.270	.375
E	.570	.500	.270	.475
F	.670	.600	.270	.575
G	.770	.720	.270	.675

Inches	mm	Inches	mm
.002	0.05	.375	9.53
.025	0.64	.400	10.16
.030	0.76	.470	11.94
.060	1.52	.475	12.07
.170	4.32	.500	12.70
.200	5.08	.570	14.48
.220	5.59	.575	14.61
.250	6.35	.600	15.24
.270	6.86	.670	17.02
.275	6.99	.675	17.15
.280	7.11	.720	18.29
.300	7.62	.770	19.56
.320	8.13	1.250	31.75
.370	9.40		

NOTES:

- Dimensions are in inches.
- Metric equivalents are in millimeters and are given for general information only.
- H dimension includes meniscus.
- S dimension shall be maintained from chip body to end of leads.

FIGURE 1. Capacitor style HV02.

AMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.

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REQUIREMENTS:

Dimensions and configuration: See [figure 1](#).

Case type: Conformally coated, molded, or encapsulated.

Lead material: In accordance with [MIL-PRF-49467](#).

Capacitance value: See [table I](#).

Capacitance tolerance: J = ± 5 percent, K = ± 10 percent, M = ± 20 percent. See [table I](#).

Operating temperature range: - 55°C to +125°C.

Voltage rating: 2,000 V dc.

Dielectric types: BP, BR, and BZ in accordance with [MIL-PRF-49467](#).

Temperature coefficient: 0 $\pm$ 30 ppm/°C (BP), ± 15 percent (BR, BZ).

Voltage-temperature limits: In accordance with [MIL-PRF-49467](#).

Symbol	Capacitance change with reference to +25°C	
	Steps A through D of voltage-temperature limit cycle table of MIL-PRF-49467 . Bias = 0 volt.	Steps E through G of voltage-temperature limit cycle table of MIL-PRF-49467 .
BP	0 $\pm$ 30 ppm/°C	100 percent rated voltage: 0 $\pm$ 30 ppm/°C
BR	± 15 percent	100 percent rated voltage: + 15, - 40 percent
BZ	± 15 percent	60 percent rated voltage: + 15, - 45 percent

Dissipation factor (+25°C): 2.5 percent maximum (BR and BZ characteristic) or 0.1 percent maximum (BP characteristic), measured under the same conditions as capacitance.

Resistance to soldering heat: In accordance with [MIL-PRF-49467](#).

Partial discharge (corona): In accordance with [MIL-PRF-49467](#).

Radiographic inspection (molded and encapsulated case types only): In accordance with [MIL-PRF-49467](#).

Part or Identifying Number (PIN). See [table I](#).

Marking: In accordance with [MIL-PRF-49467](#).

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TABLE I. Capacitor characteristics.

PIN 1/	Capacitance (pF)	Capacitance tolerance	Characteristic	Case code
M49467P02100-	10	J, K	BP	A
M49467P02120-	12	J, K	BP	A
M49467P02150-	15	J, K	BP	A
M49467P02180-	18	J, K	BP	A
M49467P02220-	22	J, K	BP	A
M49467P02270-	27	J, K	BP	A
M49467P02330-	33	J, K	BP	A
M49467P02390-	39	J, K	BP	A
M49467P02470-	47	J, K	BP	A
M49467P02560-	56	J, K	BP	A
M49467P02680-	68	J, K	BP	A
M49467P02820-	82	J, K	BP	A
M49467P02101-	100	J, K	BP	A
M49467R02101-	100	K, M	BR	A
M49467P02121-	120	J, K	BP	A
M49467R02121-	120	K, M	BR	A
M49467P02151-	150	J, K	BP	A
M49467R02151-	150	K, M	BR	A
M49467P02181-	180	J, K	BP	A
M49467R02181-	180	K, M	BR	A
M49467P02221-	220	J, K	BP	A
M49467R02221-	220	K, M	BR	A
M49467P02271-	270	J, K	BP	A
M49467R02271-	270	K, M	BR	A
M49467P02331-	330	J, K	BP	A
M49467R02331-	330	K, M	BR	A
M49467P02391-	390	J, K	BP	B
M49467R02391-	390	K, M	BR	A
M49467P02471-	470	J, K	BP	B
M49467R02471-	470	K, M	BR	A
M49467P02561-	560	J, K	BP	B
M49467R02561-	560	K, M	BR	A
M49467P02681-	680	J, K	BP	B
M49467R02681-	680	K, M	BR	A
M49467P02821-	820	J, K	BP	B
M49467R02821-	820	K, M	BR	A
M49467P02102-	1,000	J, K	BP	C
M49467R02102-	1,000	K, M	BR	A
M49467P02122-	1,200	J, K	BP	C
M49467R02122-	1,200	K, M	BR	A
M49467P02152-	1,500	J, K	BP	D
M49467R02152-	1,500	K, M	BR	A
M49467P02182-	1,800	J, K	BP	D
M49467R02182-	1,800	K, M	BR	B
M49467Z02182-	1,800	K, M	BZ	A
M49467P02222-	2,200	J, K	BP	D
M49467R02222-	2,200	K, M	BR	B
M49467Z02222-	2,200	K, M	BZ	A

See footnote at end of table.

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TABLE I. Capacitor characteristics - Continued.

PIN ^{1/}	Capacitance	Capacitance tolerance	Characteristic	Case code
	(pF)			
M49467P02272-	2,700	J, K	BP	E
M49467R02272-	2,700	K, M	BR	B
M49467Z02272-	2,700	K, M	BZ	A
M49467P02332-	3,300	J, K	BP	E
M49467R02332-	3,300	K, M	BR	B
M49467P02392-	3,900	J, K	BP	E
M49467R02392-	3,900	K, M	BR	B
M49467P02472-	4,700	J, K	BP	E
M49467R02472-	4,700	K, M	BR	C
M49467Z02472-	4,700	K, M	BZ	B
M49467P02562-	5,600	J, K	BP	F
M49467R02562-	5,600	K, M	BR	C
M49467Z02562-	5,600	K, M	BZ	B
M49467P02682-	6,800	J, K	BP	F
M49467R02682-	6,800	K, M	BR	D
M49467Z02682-	6,800	K, M	BZ	B
M49467P02822-	8,200	J, K	BP	G
M49467R02822-	8,200	K, M	BR	D
M49467Z02822-	8,200	K, M	BZ	C
	μ F			
M49467P02103-	.01	J, K	BP	G
M49467R02103-	.01	K, M	BR	D
M49467Z02103-	.01	K, M	BZ	C
M49467R02123-	.012	K, M	BR	D
M49467R02153-	.015	K, M	BR	D
M49467R02183-	.018	K, M	BR	E
M49467Z02183-	.018	K, M	BZ	D
M49467R02223-	.022	K, M	BR	E
M49467Z02223-	.022	K, M	BZ	D
M49467R02273-	.027	K, M	BR	E
M49467R02333-	.033	K, M	BR	E
M49467R02393-	.039	K, M	BR	F
M49467Z02393-	.039	K, M	BZ	E
M49467R02473-	.047	K, M	BR	F
M49467Z02473-	.047	K, M	BZ	E
M49467R02563-	.056	K, M	BR	G
M49467R02683-	.068	K, M	BR	G
M49467Z02683-	.068	K, M	BZ	F
M49467R02823-	.082	K, M	BR	G
M49467R02104-	.10	K, M	BR	G

^{1/} The complete PIN shall include an additional letter to indicate the capacitance tolerance.

APPLICATION NOTES:

Additional encapsulation is necessary in applications where the possibility of a voltage breakdown between the leads of the capacitor, or between the capacitor and another potential, could occur.

Heat sinks on each lead or adequate preheating is required when these capacitors are installed in or removed from circuits by soldering iron.

Changes from previous issue: The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC
Other - NA

Preparing activity:
DLA - CC

(Project 5910-2024-010)

Review activities:
Army - MI
Navy - MC
Air Force - 19

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using ASSIST Online database at <https://assist.dla.mil/>.