

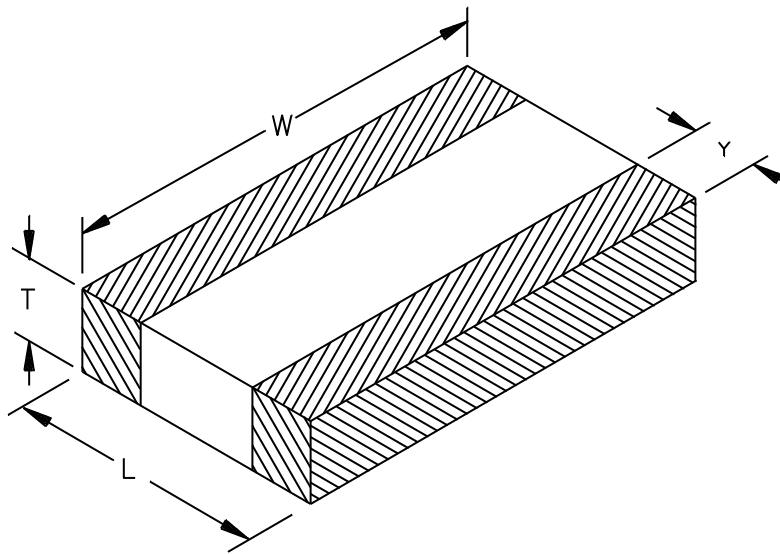
INCH-POUND
MIL-PRF-32535/10
28 September 2015

PERFORMANCE SPECIFICATION SHEET

CAPACITOR, CHIP, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE), EXTENDED RANGE, HIGH RELIABILITY AND STANDARD RELIABILITY, SIZE 0508

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-32535](#).



Dimensions			
L	W	T	Y
$\pm .010$	$\pm .010$	Max.	Min.
.050	.080	.040	.005

inches	mm
.005	0.13
.010	0.25
.040	1.02
.050	1.27
.080	2.03

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Dimensions and tolerances are for terminated chips.

FIGURE 1. Size 0508 capacitors.



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REQUIREMENTS:

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

Capacitance value: See table I.

Capacitance tolerance: See table I.

Rated voltage (V_{dc}): $V = 4$; $W = 6.3$; $X = 10$; $Y = 16$; $Z = 25$; $A = 50$. See table I for maximum rated voltage available for each capacitance value.

Operating temperature range: -55°C to $+125^{\circ}\text{C}$.

Termination finish: G, M, R, V, and Z as specified in [MIL-PRF-32535](#).

Electrode: P and B as specified in [MIL-PRF-32535](#).

Product level designator: Standard reliability – M and high reliability - T.

Marking: Package marking only in accordance with [MIL-PRF-32535](#).

TABLE I. Size 0508 capacitor characteristics.

Part or Identifying Number (PIN) 1/	Capacitance (pF)	Capacitance tolerance	VTL/TC	Rated voltage 2/ (V_{dc})	Electrode material
M3253509E2 - 102 ----	1,000	K, M	X7R	50	P, B
M3253509E2 - 222 ----	2,200	K, M	X7R	50	P, B
M3253509E2 - 472 ----	4,700	K, M	X7R	50	P, B
M3253509E2 - 103 ----	10,000	K, M	X7R	50	P, B
M3253509E2 - 153 ----	15,000	K, M	X7R	50	P, B
M3253509E2 - 223 ----	22,000	K, M	X7R	50	P, B
M3253509E2 - 473 ----	47,000	K, M	X7R	50	P, B
M3253509E2 - 683 ----	68,000	K, M	X7R	50	P, B
M3253509E2 - 104 ----	100,000	K, M	X7R	50	P, B
M3253509E2 - 154 ----	150,000	K, M	X7R	16	P, B
M3253509E2 - 184 ----	180,000	K, M	X7R	16	P, B
M3253509E2 - 224 ----	220,000	K, M	X7R	16	P, B
M3253509E2 - 474 ----	470,000	K, M	X7R	10	P, B
M3253509E2 - 684 ----	680,000	K, M	X7R	10	P, B
M3253509E2 - 105 ----	1,000,000	K, M	X7R	10	P, B

[1/](#) The complete PIN shall include additional symbols to indicate voltage, capacitance tolerance, termination finish, product level, and electrode material.

[2/](#) This is the maximum rated voltage available. All lower voltage ratings are also available.

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Custodians:

Army – CR
Navy - EC
Air Force – 85
DLA - CC

Preparing activity:

DLA - CC

(Project 5910-2015-025)

Review activities:

Army - MI
Navy - AS, MC, OS, SH
Air Force - 19, 99
Other – MDA, NA

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 the ASSIST Online database at <https://assist.dla.mil>.