

| MAX WVDC | SURGE VOLTAGE | CAP mfd | MFGR CATALOG # | CASE SIZE | MAX IMPEDANCE OHM @10 KC |
|----------|---------------|----------|----------------|-----------|--------------------------|
| 35V | 40V | 0.1 | TR35-R1A | A | 310 |
| | | 0.15 | TR35-R15A | A | 200 |
| | | 0.2 | TR35-R2A | A | 150 |
| | | 0.3 | TR35-R3A | A | 105 |
| | | 0.4 | TR35-R4A | A | 80 |
| | | 0.5 | TR35-R5A | A | 68 |
| | | 0.7 | TR35-R7A | A | 53 |
| | | 1.0 | TR35-1B | B | 34 |
| | | 1.5 | TR35-1R5B | B | 29 |
| | | 2.0 | TR35-2C | C | 17 |
| 25V | 30V | 1.0 | TR25-1A | A | 42 |
| | | 2.0 | TR25-2B | B | 25 |
| | | 4.0 | TR25-4C | C | 13 |
| | | 5.0 | TR25-5D | D | 8.5 |
| 20V | 25V | 5.0 | TR20-5C | C | 12 |
| | | 7.0 | TR20-7D | D | 7.5 |
| 15V | 18V | 1.5 | TR15-1R5A | A | 36 |
| | | 3.0 | TR15-3B | B | 22 |
| | | 10.0 | TR15-10D | D | 6.5 |
| 16V | 22.0 | TRJ-101D | D | | |

| MAX WVDC | SURGE VOLTAGE | CAP mfd | MFGR CATALOG # | CASE SIZE | MAX IMPEDANCE OHM @10 KC |
|----------|---------------|---------|----------------|-----------|--------------------------|
| 10V | 12V | 2.0 | TR10-2A | A | 32 |
| | | 4.0 | TR10-4B | B | 20 |
| | | 5.0 | TR10-5B | B | 19 |
| | | 7.0 | TR10-7C | C | 10.5 |
| | | 10.0 | TR10-10C | C | 9.5 |
| | | 15.0 | TR10-15D | D | 5.5 |
| 6V | 8V | 3.0 | TR6-3A | A | 27 |
| | | 4.0 | TR6-4A | A | 25 |
| | | 7.0 | TR6-7B | B | 17 |
| | | 15.0 | TR6-15C | C | 8.5 |
| 3V | 3.5V | 20.0 | TR6-20D | D | 8.0 |
| | | 5.0 | TR3-5A | A | 23 |
| | | 7.0 | TR3-7A | A | 22 |
| | | 10.0 | TR3-10B | B | 15.5 |
| | | 15.0 | TR3-15B | B | 14.5 |
| | | 20.0 | TR3-20C | C | 7.5 |
| | | 30.0 | TR3-30C | C | 7.0 |
| | | 40.0 | TR3-40D | D | 4.4 |
| | | 50.0 | TR3-50D | D | 4.2 |

OBSOLETE VALUES

| REVISIONS | | | | | | |
|-----------|-----|------------------------------------|---------|----------|-------|------------|
| ZONE | LTR | DESCRIPTION | DATE | E.M.N.NO | DRAFT | CHKD APPD |
| | A | REVISED & REDRAWN AS PER MFR SPEC. | 2/28/69 | 19300 | C.V. | <i>JAD</i> |

REPLACEMENT VALUES

| Max. WVDC | Surge Voltage | Cap. mfd | Models | Case Size | Max. WVDC | Surge Voltage | Cap. mfd | Models | Case Size |
|-----------|---------------|----------|-----------|-----------|-----------|---------------|----------|------------|-----------|
| 35V | 40V | 0.1 | TR35-R1A | A | 10V | 12V | 4.7 | TR10-4R7B | B |
| | | 0.15 | TR35-R15A | A | | | 6.8 | TR10-6R8C | C |
| | | 0.22 | TR35-R22A | A | | | 10.0 | TR10-10C | C |
| | | 0.33 | TR35-R33A | A | | | 15.0 | TR10-15C | C |
| | | 0.47 | TR35-R47A | A | | | 22.0 | TR10-22D | D |
| | | 0.68 | TR35-R68A | A | | | 33.0 | TR10-33D | D |
| 25V | 30V | 1.0 | TR25-1B | B | 6.3V | 7V | 6.8 | TR6.3-6R8B | B |
| | | 1.5 | TR25-1R5B | B | | | 10.0 | TR6.3-10C | C |
| | | 2.2 | TR25-2R2C | C | | | 15.0 | TR6.3-15C | C |
| | | 3.3 | TR25-3R3C | C | | | 22.0 | TR6.3-22D | D |
| | | 4.7 | TR25-4R7D | D | | | 33.0 | TR6.3-33D | D |
| | | 6.8 | TR25-6R8D | D | | | 47.0 | TR6.3-47D | D |
| 16V | 18V | 2.2 | TR16-2R2B | B | 3V | 3.5V | 10.0 | TR3-10B | B |
| | | 3.3 | TR16-3R3B | B | | | 15.0 | TR3-15B | B |
| | | 4.7 | TR16-4R7C | C | | | 22.0 | TR3-22C | C |
| | | 6.8 | TR16-6R8C | C | | | 33.0 | TR3-33C | C |
| | | 10.0 | TR16-10D | D | | | 47.0 | TR3-47D | D |
| | | 15.0 | TR16-15D | D | | | 68.0 | TR3-68D | D |
| 22.0 | TR16-22D | D | 100.0 | TR3-100D | D | | | | |

| WORKING VOLTAGE DC | | CAPACITANCE COLOR CODE * | | | | MAX PHYSICAL DIMENSIONS | | |
|--------------------|-------|--------------------------|---------------|----------------|-----------------------|-------------------------|------|--------|
| COLOR | VOLTS | COLOR | 1ST RING TENS | 2ND RING UNITS | MULTIPLICATION FACTOR | CASE SIZE | L IN | DIA IN |
| WHITE | 3V | BROWN | 1 | 1 | X10 mfd | A | 0.30 | 0.20 |
| YELLOW | 6V | RED | 2 | 2 | | B | 0.32 | 0.22 |
| BLACK | 10V | ORANGE | 3 | 3 | | C | 0.36 | 0.25 |
| GREEN | 15V | YELLOW | 4 | 4 | | D | 0.38 | 0.28 |
| BLUE | 20V | GREEN | 5 | 5 | | | | |
| GREY | 25V | VIOLET | 7 | 7 | | | | |
| ORANGE | 35V | GREY | 8 | 8 | X0.01mfd | | | |
| | | WHITE | 9 | 9 | X0.1 mfd | | | |
| | | BLACK | | | X1.0 mfd | | | |

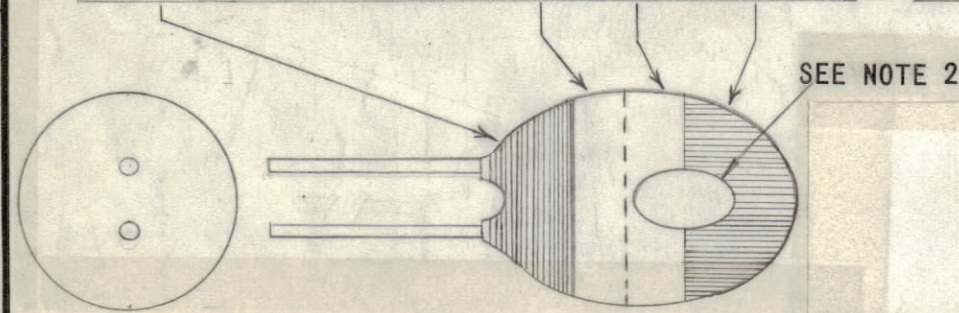
| CASE SIZE | L IN | DIA IN |
|-----------|------|--------|
| A | 0.30 | 0.20 |
| B | 0.32 | 0.22 |
| C | 0.36 | 0.25 |
| D | 0.38 | 0.28 |

TERMINAL WIRES
LENGTH — 0.61N (MIN)
DIAMETER — 0.0161N (NOM)

- NOTE:**
- * FOR CAPACITORS WHICH HAVE THREE COLOR RINGS ONLY — THE CAPACITANCE IS GIVEN BY THE UNITS COLUMN AND MULTIPLICATION FACTOR.
 - THE POSITION OF THE "RED SPOT" IS USED TO IDENTIFY THE ANODE.

ELECTRICAL CHARACTERISTICS (120 Hz)

Capacitance range: 0.1 to 100 mfd
Capacitance tolerance: ±20%
Temperature range: -55°C to +85°C
Capacitors are rated for full WVDC at +85°C
Power Factor (120 Hz): 0.2 maximum
Maximum leakage current (measured 3 minutes after application of voltage at +20° with series resistance of 1 k Ω): 0.05 µA/µFV or 2 µA whichever is the larger
Reverse polarization must not exceed 0.5V for rated voltage >6.3VDC
0.3V for rated voltage <6.3VDC
Superimposed A.C. voltage: The sum of the D.C. voltage and the peak value of superimposed A.C. voltage must not exceed the normal rated voltage and the reverse polarity may not exceed rating.
Terminal Strength: Terminal wires will withstand a pull of 1 lb. Two bands of 90° are permissible.



TMC PART NUMBER WILL BE IN THE FOLLOWING FORM:

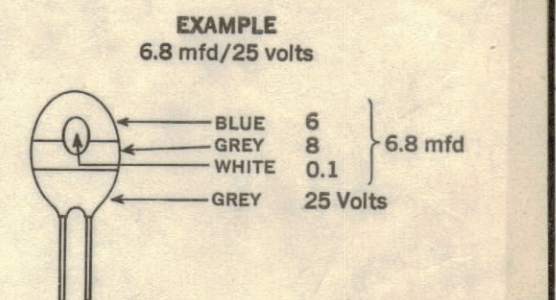
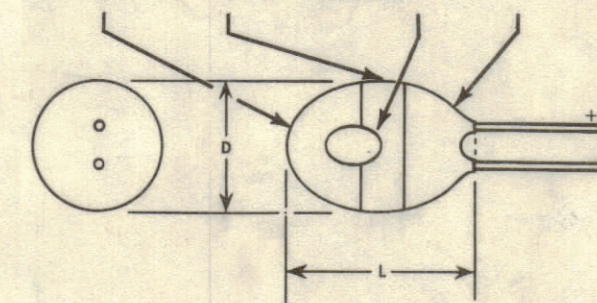
CE 122 - 1.5 - 16

BASIC P/N CAPACITANCE µF MAX WVDC

(SEE CHART)
R=DECIMAL PT
EX. 0.15µF = R15
1.5 µF = 1R5
4.0 µF = 4

| CAPACITANCE (mfd) COLOR CODE | | | | WORKING VOLTAGE DC | | MAXIMUM PHYSICAL DIMENSIONS | | |
|------------------------------|---------------|----------------|------------------------------------|--------------------|-------|-----------------------------|-------|----------|
| Color | 1st Ring Tens | 2nd Ring Units | Polarity and Multiplication Factor | Color | Volts | Case Size | L in. | Dia. in. |
| Black | — | 0 | X1.0 mfd | White | 3V | A | 0.37 | 0.20 |
| Brown | 1 | 1 | X10 mfd | Yellow | 6.3V | B | 0.39 | 0.22 |
| Red | 2 | 2 | | Black | 10V | C | 0.43 | 0.25 |
| Orange | 3 | 3 | | Green | 16V | D | 0.45 | 0.30 |
| Yellow | 4 | 4 | | Grey | 25V | | | |
| Green | 5 | 5 | | Pink | 35V | | | |
| Blue | 6 | 6 | | | | | | |
| Violet | 7 | 7 | | | | | | |
| Grey | 8 | 8 | X0.01 mfd | | | | | |
| White | 9 | 9 | X0.1 mfd | | | | | |

Terminal Wires
Length: 0.6 in. (minimum)
Diameter: 0.016 in. (nominal)



NOTE: The color spot serves both as a multiplication factor and anode indicator.

| STANDARD | | |
|-------------|---------------|-----------|
| QTY / UNIT | MODEL USED ON | ASS'Y NO. |
| APPLICATION | | |
| CODE | S401-120 | |

NOTICE TO PERSONS RECEIVING THIS DRAWING
THE TECHNICAL MATERIEL CORPORATION claims proprietary right in the material disclosed hereon. This drawing is issued in confidence for engineering information only and may not be reproduced or used to manufacture anything shown hereon without permission from THE TECHNICAL MATERIEL CORPORATION to the user. This drawing is loaned for mutual assistance and is subject to recall at any time.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES

TOLERANCES ON
DECIMALS: .X ± .05, .XX ± .01, .XXX ± .005
FRACTIONS: ± 1/64
ANGLES: ± 0° -30'

MATERIAL
FINISH

| QTY. REQ. | ITEM | PART NO. | DESCRIPTION | SYMBOL |
|--|----------------|----------|-------------|--------|
| LIST OF MATERIAL | | | | |
| THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK | | | | |
| CAPACITOR, FIXED, ELECTROLYTIC MINIATURE TANTALUM | | | | |
| SIZE | CODE IDENT.NO. | DWG NO. | ISSUE | |
| C | 82679 | CE 122 | A | |
| SCALE | | | SHEET | OF |

| | |
|----------------|---------|
| FINAL APPROVAL | DATE |
| <i>OP EFM</i> | 8/5/68 |
| MECH. DES. | DATE |
| ELECT. DES. | DATE |
| CHECKED | DATE |
| <i>JAD</i> | 8/5/68 |
| DRAWN | DATE |
| <i>CV</i> | 7/16/68 |