



Attention : **MOUSER ELECTRONICS**

Date: 2nd Sep. 2013

Murata
Manufacturing Co., Ltd.
 Head Office
 Nagaokakyo-shi, Kyoto 617-8555
 Japan
 Phone : +81 - 75 - 955 - 6863
 Fax : +81 - 75 - 955 - 6579

Re : EOL notification of leaded trimmer capacitor “TZ03 series”

We thank you very much for your continuous business relationship regarding all Murata products.

We are afraid to announce that leaded trimmer capacitor “TZ03 series” will be discontinued. The products were released around 30 years ago. Its legacy production line becomes difficult to be maintained due to unavailability of replacement parts and critical cost increase to renew machines. We are trying to continue the production so far but we finally decide EOL now.

We would like to offer the following schedule for last-time-buy and EOL. We also inform of some of competitor's products for your reference. We are very happy if you kindly accept EOL and give us your last-time-buy order no later than the day.

Subject of EOL

TZ03 series (6mm type leaded trimmer capacitor)

| | Murata PN | Type |
|----|----------------|--------------------|
| #1 | TZ03****F***** | Top adjust type |
| #2 | TZ03****N***** | Bottom adjust type |
| #3 | TZ03****Y***** | Side adjust type |

EOL schedule

- Last-time-buy: End of July, 2014
- Product discontinuation: End of September, 2014
- Last shipment: End of September, 2014

Please return your signed receipt letter by the end of December, 2013.

Please return your last-time-buy plan letter by the end of March 2014.

[Attached document]

#1: Shipment record (reference)

#2: Information of competitor's replacements

#3: Approved parts list (reference), Copy of specification (only front page if available)

If you have any questions or requests, please do not hesitate to contact us.
 Your kind understands and cooperation would be greatly appreciated.

Sincerely yours,

Authorized by
 Toshiya Kumada
 General Manager
 Thermistor and Variable Products Department

Receipt:

***Please return to our sales representative by the end of March 2014.**

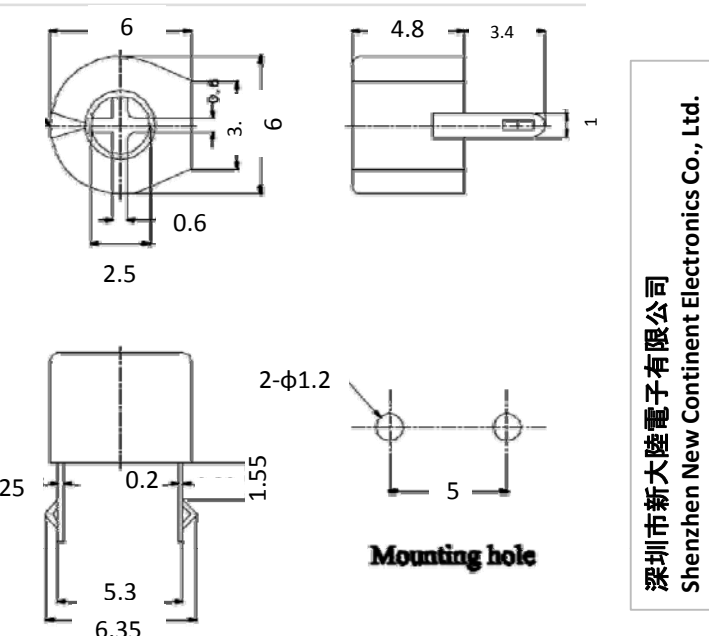
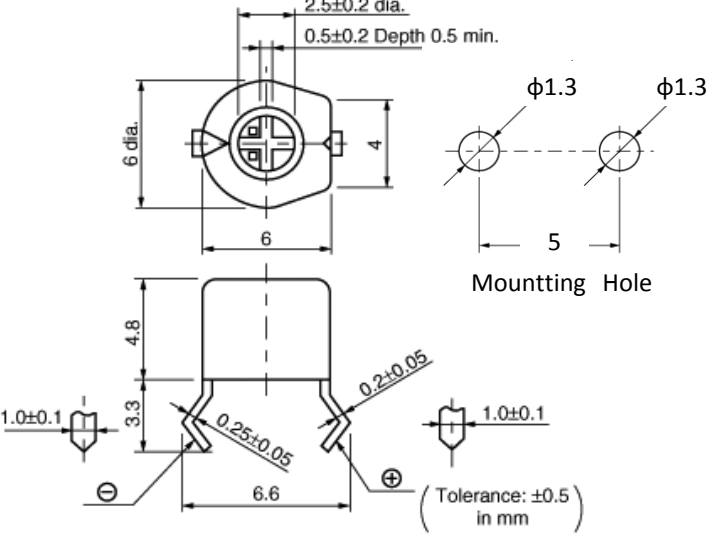
| |
|--|
| <p><input type="checkbox"/> We accept the EOL of TZ03 series.</p> <p><input type="checkbox"/> Other</p> <p>Comment:</p> <p>Company name: _____</p> <p>Signature: _____</p> <p>Date: _____</p> |
|--|

■ Part Number List

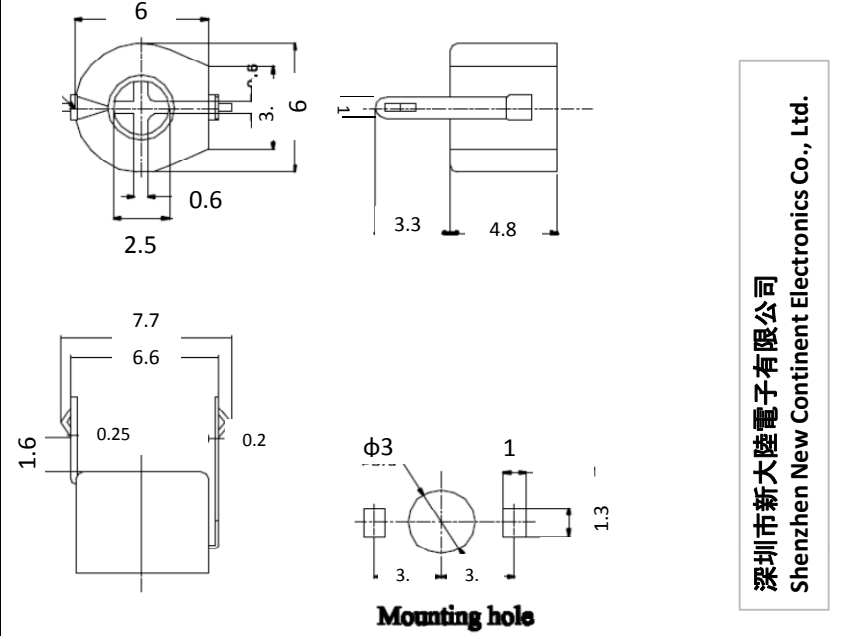
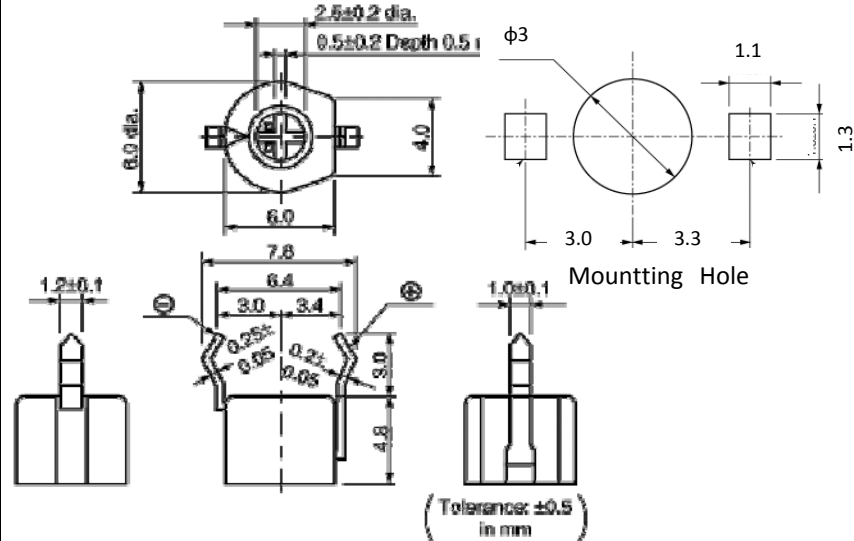
| Customer Name | Your Part Number | Murata Part Number | Sales Result(pcs./Year) | | |
|--------------------|------------------|--------------------|-------------------------|--------|--------|
| | | | 2010F | 2011F | 2012F |
| MOUSER ELECTRONICS | TZ03P450F169B00 | TZ03P450F169B00 | 10,000 | 0 | 4,000 |
| MOUSER ELECTRONICS | TZ03P450N169B00 | TZ03P450N169B00 | 2,000 | 1,000 | 0 |
| MOUSER ELECTRONICS | TZ03P600F169B00 | TZ03P600F169B00 | 27,000 | 3,000 | 39,000 |
| MOUSER ELECTRONICS | TZ03P600N169B00 | TZ03P600N169B00 | 2,000 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03R121F169B00 | TZ03R121F169B00 | 22,000 | 13,000 | 0 |
| MOUSER ELECTRONICS | TZ03R121N169B00 | TZ03R121N169B00 | 0 | 1,000 | 0 |
| MOUSER ELECTRONICS | TZ03R200F169B00 | TZ03R200F169B00 | 3,000 | 3,000 | 5,000 |
| MOUSER ELECTRONICS | TZ03R200N169B00 | TZ03R200N169B00 | 2,000 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03R300F169B00 | TZ03R300F169B00 | 5,000 | 6,000 | 10,000 |
| MOUSER ELECTRONICS | TZ03R300N169B00 | TZ03R300N169B00 | 2,000 | 0 | 1,000 |
| MOUSER ELECTRONICS | TZ03R900F169B00 | TZ03R900F169B00 | 4,000 | 0 | 1,000 |
| MOUSER ELECTRONICS | TZ03T110F169B00 | TZ03T110F169B00 | 2,000 | 2,000 | 3,000 |
| MOUSER ELECTRONICS | TZ03Z050F169B00 | TZ03Z050F169B00 | 3,000 | 5,000 | 6,000 |
| MOUSER ELECTRONICS | TZ03Z050N169B00 | TZ03Z050N169B00 | 4,000 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03Z070F169B00 | TZ03Z070F169B00 | 0 | 0 | 2,000 |
| MOUSER ELECTRONICS | TZ03Z070N169B00 | TZ03Z070N169B00 | 2,000 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03Z100F169B00 | TZ03Z100F169B00 | 5,000 | 1,000 | 5,000 |
| MOUSER ELECTRONICS | TZ03Z100N169B00 | TZ03Z100N169B00 | 0 | 1,000 | 0 |
| MOUSER ELECTRONICS | TZ03Z2R3F169B00 | TZ03Z2R3F169B00 | 1,000 | 0 | 1,000 |
| MOUSER ELECTRONICS | TZ03Z2R3N169B00 | TZ03Z2R3N169B00 | 2,000 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03Z500F169B00 | TZ03Z500F169B00 | 19,000 | 11,000 | 0 |
| MOUSER ELECTRONICS | TZ03Z500N169B00 | TZ03Z500N169B00 | 1,000 | 1,000 | 0 |
| MOUSER ELECTRONICS | TZ03R900N169B00 | TZ03R900N169B00 | 0 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03Z050Y169B00 | TZ03Z050Y169B00 | 0 | 0 | 0 |
| MOUSER ELECTRONICS | TZ03T110N169B00 | TZ03T110N169B00 | 0 | 0 | 0 |

Cross Reference for muRata TZ03 series

(1) Top adjustment type

| P/N | Dimensions |
|--|---|
| <p>NCE TC03_H Series Integration (Replacement)</p> |  <p style="text-align: center;">Mounting hole</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>深圳市新大陸電子有限公司 Shenzhen New Continent Electronics Co., Ltd.</p> </div> |
| <p>muRata TZ03_F Series Withdrawn item</p> |  <p style="text-align: center;">Mounting Hole</p> <p style="text-align: center;">(Tolerance: ±0.5 in mm)</p> |

(2) Rear adjustment type

| P/N | Dimensions |
|--|--|
| <p>NCE TC03_N Series Integration (Replacement)</p> |  <p style="text-align: center;">Mounting hole</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>深圳市新大陸電子有限公司 Shenzhen New Continent Electronics Co., Ltd.</p> </div> |
| <p>muRata TZ03_N Series Withdrawn item</p> |  <p style="text-align: center;">Mounting Hole</p> <p style="text-align: center;">(Tolerance: ±0.5 in mm)</p> |

Note: There isn't any replacement item of TZ03_Y type due to side adjustment.

Replacement P/N for muRata TZ03 series

| Withdrawn Products/muRata TZ03 series | | | | | | | Integration Products/NCE TC03 series | | | | | |
|---------------------------------------|-----------------|-----------------|-------|----------------------------|-------------------|-----------------------|--|-----------------|-------|----------------------------|-------------------|-----------------------|
| | | | | | | | 深圳市新大陸電子有限公司 Shenzhen New Continent Electronics Co., Ltd. | | | | | |
| | MURATA P/N | Capacitance[pF] | | Temp. Coefficient [ppm/°C] | Q (at 1MHz Cmax.) | Rated voltage [V.D.C] | NCE P/N | Capacitance[pF] | | Temp. Coefficient [ppm/°C] | Q (at 1MHz Cmax.) | Rated voltage [V.D.C] |
| | | Cmin. | Cmax. | | | | | Cmin. | Cmax. | | | |
| 1 | TZ03Z2R3■169B00 | 1.25 | 2.3 | NP0±200 | 300 | 100 | TC03Z050▲169B00 | 2.0 | 5.0 | NP0±300 | 500 | 100 |
| 2 | TZ03Z050■169B00 | 1.5 | 5.0 | NP0±200 | 500 | 100 | TC03Z050▲169B00 | 2.0 | 5.0 | NP0±300 | 500 | 100 |
| 3 | TZ03Z070■169B00 | 2.0 | 7.0 | NP0±200 | 500 | 100 | TC03Z100▲169B00 | 3.0 | 10.0 | NP0±300 | 500 | 100 |
| 4 | TZ03N100■169B00 | 2.1 | 10.0 | N200±200 | 500 | 100 | TC03Z100▲169B00 | 3.0 | 10.0 | NP0±300 | 500 | 100 |
| 5 | TZ03Z100■169B00 | 2.7 | 10.0 | NP0±200 | 500 | 100 | TC03Z100▲169B00 | 3.0 | 10.0 | NP0±300 | 500 | 100 |
| 6 | TZ03T110■169B00 | 3.0 | 11.0 | N450±300 | 500 | 100 | TC03Z100▲169B00 | 3.0 | 10.0 | NP0±300 | 500 | 100 |
| 7 | TZ03R200■169B00 | 4.2 | 20.0 | N750±300 | 500 | 100 | TC03SL200▲169B00 | 5.5 | 20.0 | N1200±500 | 500 | 100 |
| 8 | TZ03T200■169B00 | 4.2 | 20.0 | N450±300 | 500 | 100 | TC03SL200▲169B00 | 5.5 | 20.0 | N1200±500 | 500 | 100 |
| 9 | TZ03R300■169B00 | 5.2 | 30.0 | N750±300 | 500 | 100 | TC03SL300▲169B00 | 6.5 | 30.0 | N1200±500 | 500 | 100 |
| 10 | TZ03P450■169B00 | 6.8 | 45.0 | N1200±500 | 300 | 100 | TC03DL500▲169B00 | 12.0 | 50.0 | N2200±800 | 300 | 100 |
| 11 | TZ03P600■169B00 | 9.8 | 60.0 | N1200±500 | 300 | 100 | TC03DL600▲169B00 | 14.0 | 60.0 | N2200±800 | 300 | 100 |
| 12 | TZ03Z500■169B00 | 6.0 | 50.0 | NP0±300 | 300 | 50 | TC03DL500▲169B00 | 12.0 | 50.0 | N2200±800 | 300 | 100 |
| 13 | TZ03R900■169B00 | 9.0 | 90.0 | N750±300 | 300 | 50 | TC03D900▲169B00 | 25.0 | 90.0 | N3300±1200 | 300 | 100 |
| 14 | TZ03R121■169B00 | 10.0 | 120.0 | N750±300 | 300 | 50 | TC03D121▲169B00 | 35.0 | 120.0 | N3300±1200 | 300 | 100 |

note: ■ is filled with F or N as terminal shape. F is for top adjustment, N is for rear adjustment, and Y is for side adjustment.

▲ is filled with H or N as terminal shape. H is for top adjustment, N is for rear adjustment.

There isn't any replacement item instead of TZ03_Y type due to side adjustment.