

Document Receipt Acknowledgement
Date:
Section:
Name:



DM-TA17-002-G0190
Date; Jun.,26,2018

Attention:

FARNELL ELEC COMPONENTS LTD

Product Withdrawal Notice

Ceramic Trimmer Capacitor TZ Series

Dear Valued Customer,

Thank you very much for your great and continuous support for business with Murata. This is the official notification that one of our products will be discontinued as detailed below. Please review documents and kindly indicate your feedback for this Notice in writing by due date. Also, please place Last Time Buy Order by the Last Time Order Due Date as needed. Your understanding and support are highly appreciated.

1. Product Type, Customer/Murata/Alternative Part Numbers:

Product Type: Ceramic Trimmer Capacitor TZ Series

It includes all Trimmer Capacitors (TZ***) and all adjustment tools (KM***).

Please refer to the attached documents for detailed competitors Part Numbers' information.

Accumulation delivery quantity after April, 2013
561,199

2. Reasons/Background:

Demand decreased due to the rise of alternative adjustment method of mechanical adjustment method using TZ series product. Because production scale reduced with demand decrease, business maintenance became difficult.

3. Product Withdrawal Schedule and Feedback Due

Feedback items	Feedback Due	Explanation
1. Confirmation Letter (Page 2)	Mar.,31,2019	Please choose an applicable response from choices mentioned in Page 2. Please fill out required quantity if you need after April 1, 2019.
2. Last Time Order Due	Mar.,31,2019	If it is difficult to meet Last time Due or Last Shipment Due Dates written in left column, please fill out your requested due date in confirmation letter (Page 2).
3. Last Shipment Due	Mar.,31,2021	

4. Contact Window:

Should you have any questions or concerns, please contact Murata Sales, Representative, or Distributor in your area.

Truly Yours. Thank you.

Murata Manufacturing, Co., Ltd.
Planning and Promotion Department. Sensor Products Division.
General Manager, Yoshitaka Nagao

納入実績/Sales History

弊社に登録されている貴社品番は下記になります。

Please find the list below for the target part numbers which are registered as yours in Murata. (Customer Part Number)

下記に記載の無い貴社品番につきましても、弊社の対象品種については申し入れに含むことと致します。

Regardless of the list below, all part numbers shall be the target as far as they are categorized into the Product Type indicated in the Document.


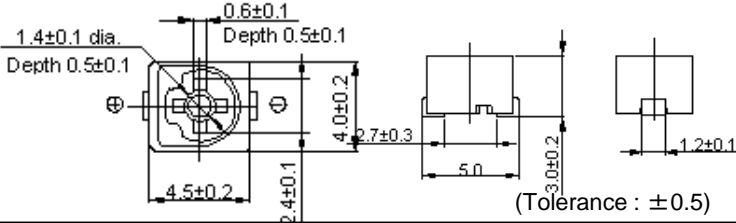
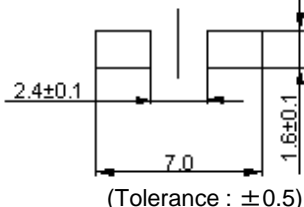



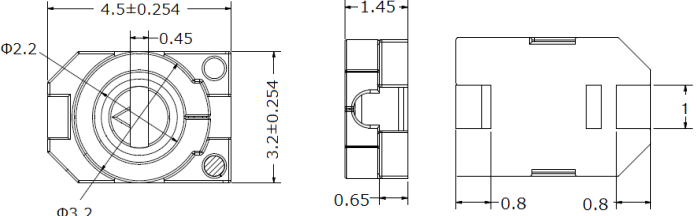
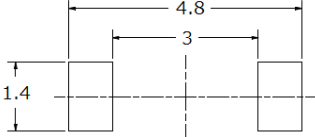
*1: 現行品と代替品は形状が異なります。詳細は添付のComparison Tableをご確認ください。

Grand Total	561,199
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*1: The shape of the product differs between the current product and the replacement one. For details, please check Comparison Table attached letter.

口座番号 Account Number	お客様名 Customer Name	貴社品番 Customer Part Number	弊社品番 Murata Part Number	同業社名 Competitor Company	代替品番 Replacement Part Number	Sales Quantity (Unit: pieces)					代替品 比較資料 Cross Ref.
						納入数 (単位: 個) "FY" means fiscal year from Apr. to Mar.					
						'13FY	'14FY	'15FY	'16FY	'17FY	
					Subtotal	87,839	85,693	112,333	140,682	134,652	
G0190	FARNELL ELEC COMPONENTS LTD	1115036	TZW4Z1R5A001R00		Nothing	1,500	1,000	1,500	1,500	0	
G0190	FARNELL ELEC COMPONENTS LTD	1760635	TZB4R200AB10R00	Knowles	JZ200*1	5,000	4,000	1,000	4,000	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	1760636	TZB4P300AB10R00	Knowles	JZ300*1	2,500	3,500	3,000	8,000	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	1760637	TZB4P400AB10R00	Knowles	JZ400*1	7,000	4,000	19,000	5,500	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	1760638	TZB4R500AB10R00	Knowles	JZ500*1	7,500	10,000	15,500	17,500	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2456138	TZC3P200A110R00	Knowles	JZ200/JZL200	0	1,000	4,000	3,000	9,000	TZC
G0190	FARNELL ELEC COMPONENTS LTD	2456139	TZC3P300A110R00	Knowles	JZ300	0	2,000	5,000	7,000	18,000	TZC
G0190	FARNELL ELEC COMPONENTS LTD	2456140	TZC3R100A110R00	Knowles	JZ100/JZL100	0	1,000	3,000	4,000	8,000	TZC
G0190	FARNELL ELEC COMPONENTS LTD	2456141	TZC3Z060A110R00	Knowles	JZ060	0	1,000	2,000	1,000	5,000	TZC
G0190	FARNELL ELEC COMPONENTS LTD	2629551	TZB4P300AB10R00	Knowles	JZ300*1	0	0	0	3,500	9,000	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2629552	TZB4P400AB10R00	Knowles	JZ400*1	0	0	0	500	3,000	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2629553	TZB4R200AB10R00	Knowles	JZ200*1	0	0	0	1,500	1,000	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2629554	TZB4R500AB10R00	Knowles	JZ500*1	0	0	0	7,500	14,500	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2629555	TZB4Z100AB10R00	Knowles	JZ100/JZL100*1	0	0	0	7,500	2,500	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2629556	TZB4Z250AB10R00	Knowles	JZL250*1	0	0	0	8,500	24,500	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2666610	TZB4Z030AB10R00	Knowles	JZ030*1	0	0	0	4,000	5,500	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2666611	TZB4Z060AB10R00	Knowles	JZ060*1	0	0	0	2,000	3,000	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	2666612	TZW4Z1R5A001R00		Nothing	0	0	0	1,000	3,500	
G0190	FARNELL ELEC COMPONENTS LTD	3531764	KMDR010		Nothing	339	193	333	182	152	
G0190	FARNELL ELEC COMPONENTS LTD	9528610	TZB4Z030AB10R00	Knowles	JZ030*1	8,500	11,500	4,000	7,500	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	9528628	TZB4Z060AB10R00	Knowles	JZ060*1	3,000	3,000	3,000	2,000	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	9528636	TZB4Z100AB10R00	Knowles	JZ100/JZL100*1	14,500	6,000	8,000	12,000	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	9528644	TZB4Z250AB10R00	Knowles	JZL250*1	2,000	6,000	10,000	6,000	0	TZB_A
G0190	FARNELL ELEC COMPONENTS LTD	9528652	TZC3P200A110B00	Knowles	JZ200/JZL200	5,000	12,000	11,000	3,000	7,000	TZC
G0190	FARNELL ELEC COMPONENTS LTD	9528660	TZC3P300A110B00	Knowles	JZ300	9,000	10,500	8,000	14,000	9,500	TZC
G0190	FARNELL ELEC COMPONENTS LTD	9528679	TZC3R100A110B00	Knowles	JZ100/JZL100	17,000	4,000	8,000	2,000	3,500	TZC
G0190	FARNELL ELEC COMPONENTS LTD	9528687	TZC3Z030A110B00	Knowles	JZ030	2,500	1,000	2,500	3,000	4,000	TZC
G0190	FARNELL ELEC COMPONENTS LTD	9528695	TZC3Z060A110B00	Knowles	JZ060	2,500	4,000	3,500	3,500	4,000	TZC

Comparison Table / TZB4_A series VS VOLTRONICS

	Series Name	Appearance	Dimensions (Unit:mm)	Land Pattern(Unit : mm)	URL
Current	TZB4 ****A series MURATA		 (Tolerance : ±0.5)	 (Tolerance : ±0.5)	http://www.murata.com/ja-jp/products/capacitor/trimmer/tzb4
Replacement	JZ series  DLI-Johanson MFG-Novacap-Syfer-Voltronics 				http://www.knowlescapacitors.com/Products/Trimmer/Half-Turn/JZ-Series.aspx

	MURATA P/N	Stator color	Capacitance (pF)		Temp. Characteristics (ppm/°C)	Q at 1MHz (min.)	Rated voltage	Withstanding Voltage	
	VOLTRONICS P/N		Min.(+0%)	Max.(+50/-0%)					
Current	TZB4Z030A	Brown	1.4	3	NP0±200	300	100Vdc	220Vdc	
Replacement	JZ030	Black	1.5						
Current	TZB4Z060A	Blue	2.0	6	NP0±200	500			
Replacement	JZ060		NP0±300						
Current	TZB4Z100A	White	3.0	10	NP0±300	500	250Vdc	550Vdc	
Replacement	JZL100	Gray	4.0		N1200±500				
Replacement	JZ100	White	2.0		NP0±300				
Current	TZB4R200A	Red	4.5	20	N750±400	300	250Vdc	550Vdc	
Replacement	JZL200		7.0		N1200±500				
Replacement	JZ200		4.5		NP0±500		500		
Current	TZB4P300A	Green	6.5	30	N1200±500	300	100Vdc	220Vdc	
Replacement	JZ300	Orange	5.5		N1500±1000				200
Current	TZB4P400A	Yellow	8.5		N1200±500				300
Replacement	JZ400		8.0	N1500±1000	200				
Current	TZB4Z250A	Black+Marking	4.0	25(+100/-0%)	NP0±300	300	50Vdc	110Vdc	
Replacement	JZL250	-	6.0	25	N1200±500	300	250Vdc	550Vdc	
Current	TZB4R500A	Black+Marking	7.0	50(+100/-0%)	N750±300	300	50Vdc	110Vdc	
Replacement	JZ500	Yellow	8.0	50	N1500±1000	200	100Vdc	220Vdc	

Comparison Table / TZC3 series VS VOLTRONICS



	Appearance	Dimensions (Unit : mm)	Land Pattern (Unit : mm)	URL
Current	<p>TZC3 series MURATA</p>			http://www.murata.com/ja-ip/products/capacitor/trimmer/tzc3
Replacement	<p>JZ series knowles DLJ-Johanson MFG-Novacap-Syfer-Voltronics Voltronics CORPORATION</p>			http://www.knowlescapacitors.com/Products/Trimmer/Half-Turn/JZ-Series.aspx

	MURATA P/N	Stator color(Current) Marking	Capacitance (pF)		Temp. Characteristics (ppm/°C)	Q at 1MHz (min.)	Rated voltage	Withstanding Voltage	
	VOLTRONICS P/N		Min.(+0%)	Max.(+50/-0%)					
Current	TZC3Z030	Brown ※1	1.4	3	NP0±300	300	100Vdc	220Vdc	
Replacement	JZ030	Black	1.5		NP0±200				500
Current	TZC3Z060	Blue ※1	2.0	6	NP0±300	500	100Vdc	220Vdc	
Replacement	JZ060	Blue							
Current	TZC3R100	White ※1	3.0	10	N750±300	500	100Vdc	220Vdc	
Replacement	JZL100	Gray	4.0		N1200±500		500	250Vdc	550Vdc
	JZ100	—	2.0		NP0±300			100Vdc	220Vdc
Current	TZC3P200	Red ※1	5.0	20	N1200±500	300	100Vdc	220Vdc	
Replacement	JZL200	Red	7.0		N1200±500		250Vdc	550Vdc	
	JZ200		4.5		NP0±500		500	100Vdc	220Vdc
Current	TZC3P300	Green ※1	6.5	30	N1200±500	300	100Vdc	220Vdc	
Replacement	JZ300	Orange	5.5		N1500±1000				200

※1 : Stator color of TZC3□▲▲▲AA01 is black.