

01.02.2013

## Produktänderung

### Ersatz von 3-Elektrodenableitern der Serien ER, EK, ET und EL

EPCOS 3-Elektrodenableiter der Serien ER, EK, ET und EL, die bisher im Werk in Xiaogan, China, gefertigt wurden, werden ab 1. Mai 2013 durch modifizierte Typen aus Johore Bahru, Malaysia, ersetzt. Dazu werden die in Johore Bahru seit Jahren etablierten Fertigungsprozesse für 3-Elektrodenableiter genutzt.

#### Betroffene Produkte

Bisher		Neu	
Typ	Bestellnummer	Typ	Bestellnummer
ER0-A230X	B88069X3491C253	T30-A230X	B88069X3060C253
ER3-A90X	B88069X8701B502	T33-A90X8	B88069X2323B502
ER3-A350XF1	B88069X4721B502	T33-A350X8F1	B88069X9921B502
ER35-A250XF1	B88069X5261B502	ER35-A250XF1	B88069X5261B502
EK4-A90XF1	B88069X9021B502	T97A-A90X1F1	B88069X1713B502
EK4-A230XF1	B88069X2601B502	T97A-A230X1F1	B88069X1743B502
EK230XFV	B88069X6230B202	T4N-A230XFV	B88069X7480B202
ET90XP3	B88069X5071B502	ET90XP3	B88069X5071B502
ET225XP3	B88069X5061B502	ET225XP3	B88069X5061B502
ET250XP3	B88069X4200B502	ET250XP3	B88069X4200B502
ET300XP3	B88069X5541B502	ET300XP3	B88069X5541B502
ET350XP3	B88069X5551B502	ET350XP3	B88069X5551B502
ET230XCLF4	B88069X2711B502	EB3-C230XF1	B88069X8431B502
ET3-A230XF1	B88069X4150B502	T83-A230XF1	B88069X9420B502
ET5-A230X	B88069X6371B502	ET5-A230X	B88069X6371C203
EL3-A230XF1	B88069X6091B502	TC83-A230XF1	B88069X5611B502

Die Funktionalität der neuen Typen aus Johore Bahru weicht nicht von den bisherigen Typen ab. Details sind den Datenblättern unter [www.epcos.de/arresters3](http://www.epcos.de/arresters3) und dem Anhang zu entnehmen.

**Anlage** PCN  
Details zu den Änderungen

**Kontakt** Michael Mewes, PPD AB/VAR PM, Berlin

**Kunden wenden sich bei Fragen bitte direkt an ihren Ansprechpartner im Vertrieb.**



**Product / Process Change Notification  
Produkt-/ Prozess-Änderungsmitteilung**

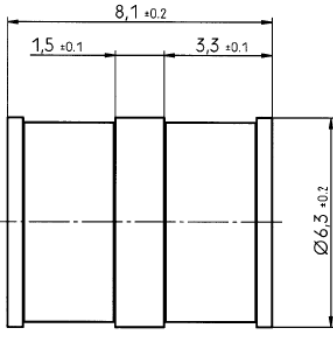
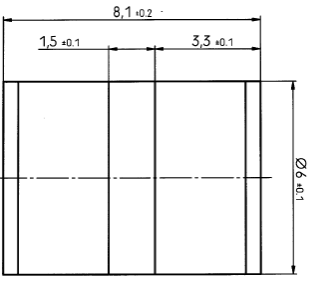
<b>1. ID No. / ID-Nr.:</b> PPD 18/T117		<b>2. Date of announcement / Datum der Ankündigung:</b> February 1, 2013	
<b>3. Type / Produktgruppe:</b> 3-electrode arresters of ER, EK, ET and EL series / 3-Elektrodenableiter der Serien ER, EK, ET und EL	<b>Old ordering code / Alte Bestell-Nr.:</b> See annex / Siehe Anhang	<b>New ordering code / Neue Bestell-Nr.:</b> See annex / Siehe Anhang	<b>Customer part number / Kundensachnummer:</b>
<b>4. Description of change / Beschreibung der Änderung:</b> <p>To reduce the complexity of our processes, the 3-electrode arresters of the ER, EK, ET and EL series - hitherto produced in our plant in China - will be replaced by modified types from our plant in Johore Bahru, Malaysia. For this purpose, we will use the production processes for 3-electrode arresters already well established in Johore Bahru. The resulting changes in material and dimensions as well as in type names and ordering codes for the replacement types are outlined in the annex./</p> <p>Um die Komplexität unserer Prozesse zu reduzieren, werden 3-Elektrodenableiter der Serien ER, EK, ET und EL, die bisher in unserem Werk in China gefertigt wurden, durch modifizierte Typen aus Johore Bahru, Malaysia, ersetzt. Dazu werden die in Johore Bahru seit Jahren etablierten Fertigungsprozesse für 3-Elektrodenableiter genutzt. Die sich für die Ersatztypen ergebenden Änderungen bezüglich Material und Abmessungen sowie Typnamen und Bestellnummern sind in der Anlage aufgeführt.</p>			
<b>5. Effect on the product or for customers (quality, specification, lead time) / Auswirkung auf das Produkt oder für den Kunden (Qualität, Spezifikation, Lieferzeiten):</b> <p>The functionality does not deviate from the current production. The concentration of production of the 3-electrode arrester series described above will have a positive impact on delivery times./</p> <p>Die Funktionalität weicht nicht von der aktuellen Fertigung ab. Durch die Konzentration der Fertigung der 3-Elektrodenableiter der oben genannten Serien werden sich positive Effekte auf die Lieferzeiten ergeben.</p>			
<b>6. Quality assurance measures / Maßnahmen zur Qualitätssicherung:</b> <p>The qualification is in accordance with our internal green-light quality procedure. Additional control plans and PFMEA have been added. All quality assurance measures are maintained./</p> <p>Die Qualifikation erfolgte nach unseren internen Freigaberichtlinien. Zusätzliche Prüfpläne und Prozess-FMEA wurden angelegt. Alle Qualitätssicherungsmaßnahmen werden weitergeführt.</p>			
<b>7. Scheduled date of introduction / Geplante Einführung:</b> May 1, 2013			
<b>8. Customer feedback / Rückmeldung vom Kunden:</b> <p>If EPCOS does not receive notification to the contrary within a period of 10 weeks, EPCOS assumes that the customer agrees to the change. For an interim period we cannot rule out that old as well as new products will be shipped. Falls EPCOS innerhalb von 10 Wochen keine gegenteilige Mitteilung erhält, geht EPCOS davon aus, dass die geplante Änderung vom Kunden akzeptiert ist. Innerhalb einer Übergangszeit kann es vorkommen, dass sowohl alte wie auch neue Ware geliefert wird.</p>			



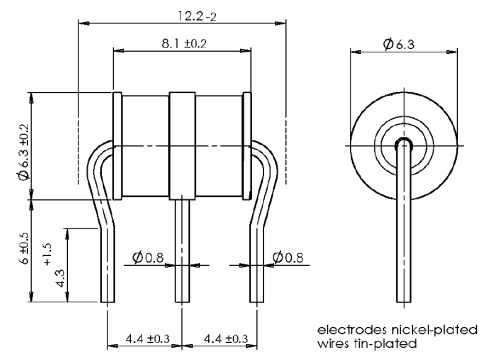
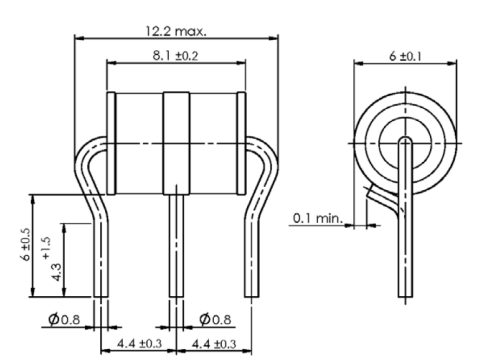
Quality Management: Name: Dr. W. Pint	Signature sgd. Dr. Pint
Product Marketing: Tel: +49 30 386 29268 Fax: +49 30 386 26485 E-mail: michael.mewes@epcos.com Name: Michael Mewes	Signature sgd. Mewes
Customer acknowledgement Bestätigung durch den Kunden	Signature

**Annex to UPtoDATE 130201AB2 and PCN PPD 18/T117 of February 1, 2013 /  
Replacement of 3-electrode arresters of the ER, EK, ET and EL series**

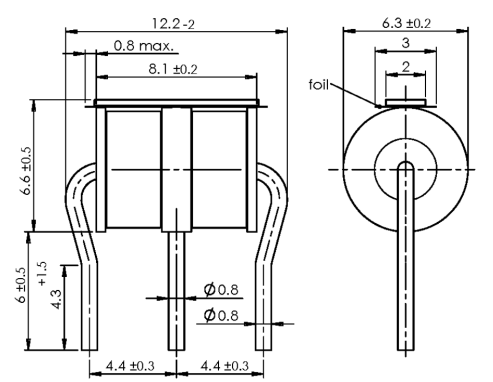
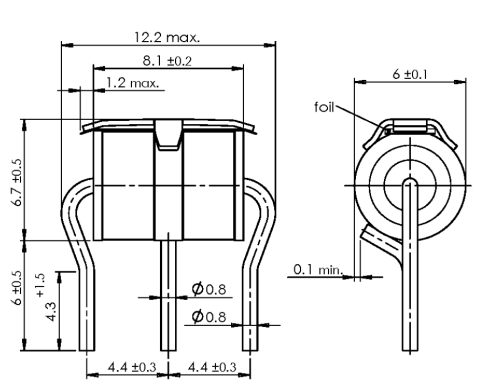
**Changes from ER0-A230X to T30-A230X**

	<b>Current</b>	<b>New</b>
Type	ER0-A230X	T30-A230X
Ordering code	B88069X3491C253	B88069X3060C253
Electrodes/ diameter	Nickel/ 6.3 mm	Copper/ 6.0 mm
Plating layer of electrodes	Nickel	Tin
Marking	ER 230 YY O (YY: Year)	230 YY O (YY: Year)
Dimensional drawing	 <p>Technical drawing of the ER0-A230X arrester showing dimensions: total length 8,1 ±0,2 mm, distance from left end to first electrode 1,5 ±0,1 mm, distance between electrodes 3,3 ±0,1 mm, and diameter Ø6,3 ±0,2 mm.</p>	 <p>Technical drawing of the T30-A230X arrester showing dimensions: total length 8,1 ±0,2 mm, distance from left end to first electrode 1,5 ±0,1 mm, distance between electrodes 3,3 ±0,1 mm, and diameter Ø6,0 mm.</p>

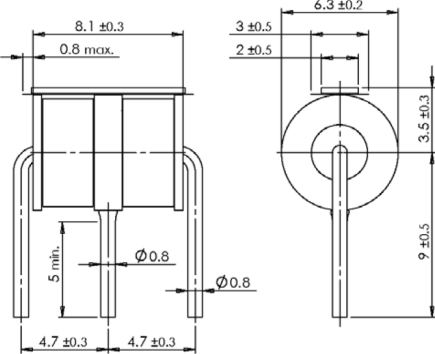
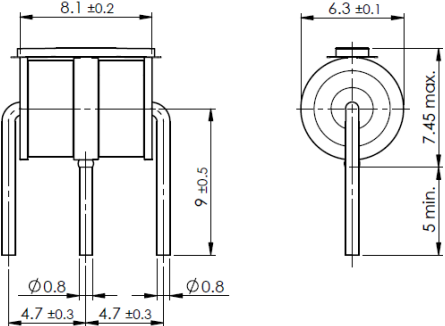
**Changes from ER3-A90X to T30-A90X8**

	Current	New
Type	ER3-A90X	T33-A90X8
Ordering code	B88069X8701B502	B88069X2323B502
Electrodes/ diameter	Nickel/ 6.3 mm	Copper/ 6.0 mm
Plating layer of electrodes	Nickel	Tin
Center wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Terminal wire	Tin-plated copper wire	Tin-plated copper wire
Marking	ER 90 YY O (YY: Year)	90 YY O (YY: Year)
Dimensional drawing	 <p style="text-align: center;">electrodes nickel-plated wires tin-plated</p>	

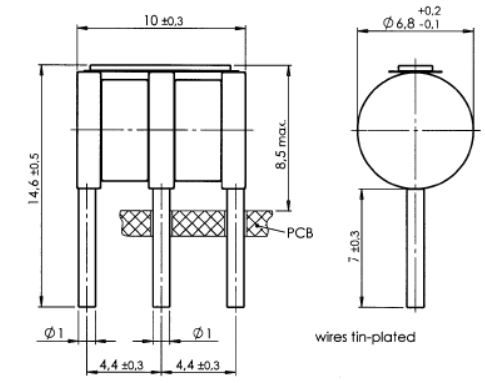
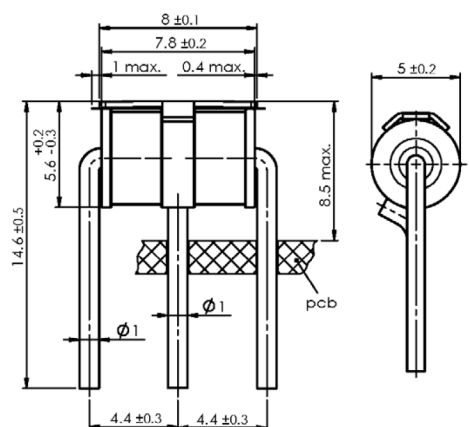
**Changes from ER3-A350XF1 to T33-A350X8F1**

	<b>Current</b>	<b>New</b>
Type	ER3-A350XF1	T33-A350X8F1
Ordering code	B88069X4721B502	B88069X9921B502
Electrodes/ diameter	Nickel/ 6.3 mm	Copper/ 6.0 mm
Plating layer of electrodes	Nickel	Tin
Center wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Fail-safe clip	CuBe2	K55 (CuNi3Si1Mg)
Fail-safe foil	Hostaphan RN50 (red)	Hostaphan Rn50 (transparent)
Fail-safe welding	Impulse welding	Laser welding
Marking	ER 350 YY O (YY: Year)	350 YY O (YY: Year)
Dimensional drawing	 <p>Technical drawing of the ER3-A350XF1 component showing dimensions: 12.2-2 (total length), 0.8 max. (top width), 8.1 ±0.2 (top width), 6.6 ±0.5 (height), 6 ±0.5 (height), 4.3 ±1.5 (height), 4.3 (height), 4.4 ±0.3 (width), 4.4 ±0.3 (width), 6.3 ±0.2 (width), 3 (width), 2 (width), and Ø0.8 (wire diameter).</p>	 <p>Technical drawing of the T33-A350X8F1 component showing dimensions: 12.2 max. (total length), 8.1 ±0.2 (top width), 1.2 max. (top width), 6.7 ±0.5 (height), 6 ±0.5 (height), 4.3 ±1.5 (height), 4.3 (height), 4.4 ±0.3 (width), 4.4 ±0.3 (width), 6 ±0.1 (width), and 0.1 min. (gap).</p>

**Changes from ER35-A250XF1 to ER35-A250XF1 (new)**

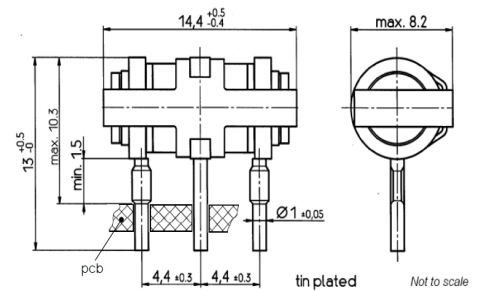
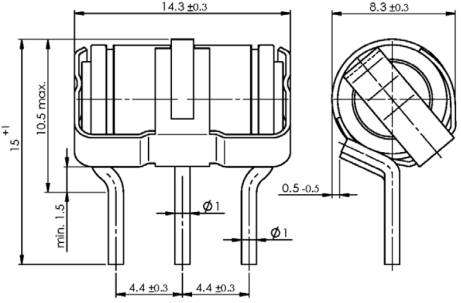
	Current	New
Type	ER35-A250XF1	ER35-A250XF1
Ordering code	B88069X5261B502	B88069X5261B502
Terminal electrodes/ diameter	Nickel/ 6.3 mm	Copper/ 6.3 mm
Plating layer of electrodes	Nickel	Tin
Center wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Dimensional drawing		

**Changes from**  
**EK4-A90XF1 to T97A-A90X1F1**  
**EK4-A230XF1 to T97A-A230X1F1**

	Current	New
Type	EK4-A90XF1	T97A-A90X1F1
Ordering code	B88069X9021B502	B88069X1713B502
Marking	EK 90 YY O (YY: Year)	90 YY O (YY: Year)
Type	EK4-A230XF1	T97A-A230X1F1
Ordering code	B88069X2601B502	B88069X1743B502
Marking	EK 230 YY O (YY: Year)	230 YY O (YY: Year)
Electrodes/ diameter	Nickel/ 6.3 mm	Copper/ 5.0 mm
Plating layer of electrodes	Nickel	Tin
Wires	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Terminal wire welding	Butt welding	Radial welding
Fail-safe clip	CuBe2	K55 (CuNi3Si1Mg)
Fail-safe foil/ melting temp.	PP (white) / 140°C	PEN (transparent / 260°C)
Fail-safe welding	Impulse welding	Laser welding
Dimensional drawing		



**Changes from EK230XFV to T4N-A230XFV**

	Current	New
Type	EK230XFV	T4N-A230XFV
Ordering code	B88069X6230B202	B88069X7480B202
Electrodes	Nickel	Copper
Wires	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Terminal wire welding	Butt welding	Tangential welding
PCB clearance height	10.3 max	10.5 max
Dimensional drawing		

**Changes from**

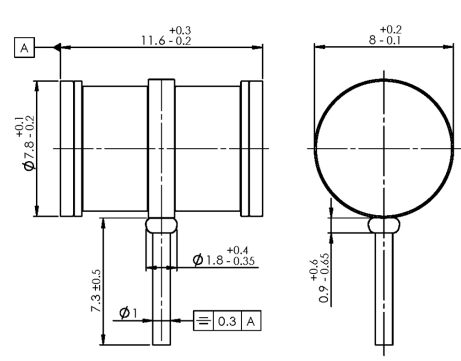
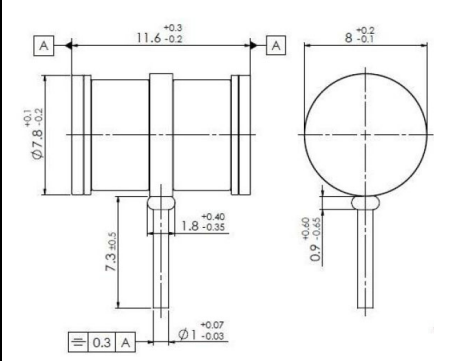
**ET90XP3 to ET90XP3 (new)**

**ET225XP3 to ET225XP3 (new)**

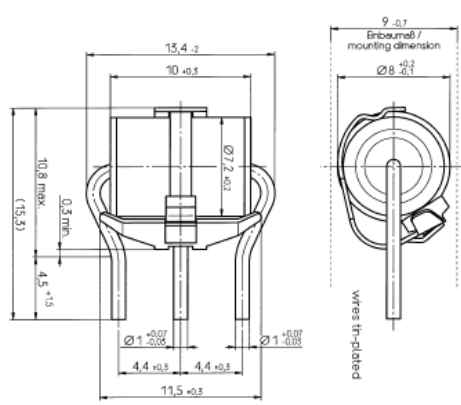
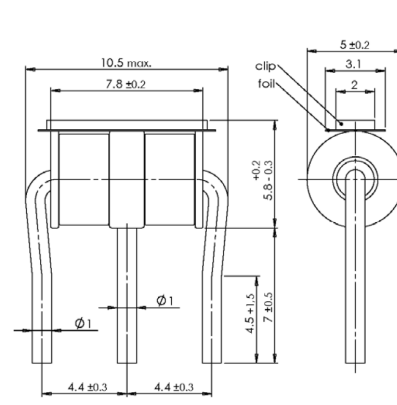
**ET250XP3 to ET250XP3 (new)**

**ET300XP3 to ET300XP3 (new)**

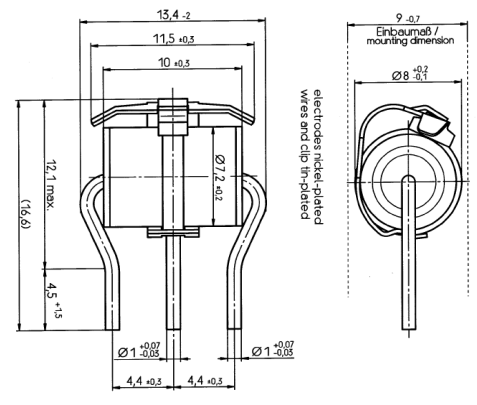
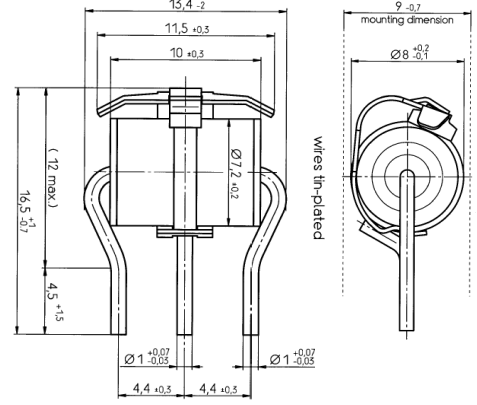
**ET350XP3 to EP350XP3 (new)**

	Current	New
Type	ET90XP3	ET90XP3
Ordering code	B88069X5071B502	B88069X5071B502
Type	ET225XP3	ET225XP3
Ordering code	B88069X5061B502	B88069X5061B502
Type	ET250XP3	ET250XP3
Ordering code	B88069X4200B502	B88069X4200B502
Type	ET300XP3	ET300XP3
Ordering code	B88069X5541B502	B88069X5541B502
Type	ET350XP3	ET350XP3
Ordering code	B88069X5551B502	B88069X5551B502
Electrodes/ diameter	Nickel/ 7.8 mm	Copper/ 7.8 mm
Plating layer of electrodes	Nickel	Tin
Wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Dimensional drawing		

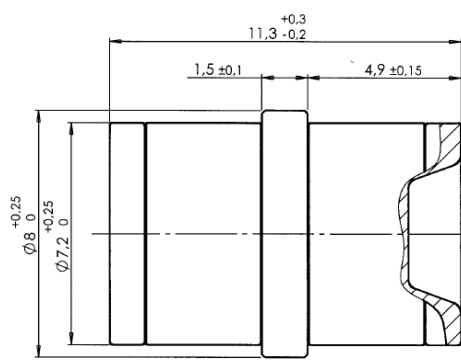
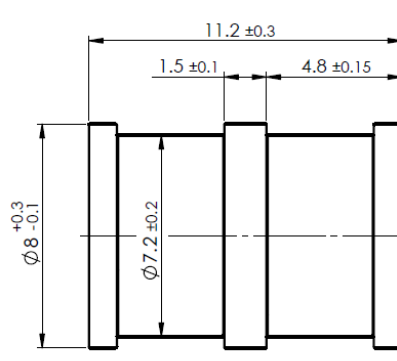
**Changes from ET230XCLF4 to EB3-C230XF1**

	<b>Current</b>	<b>New</b>
Type	ET230XCLF4	EB3-C230XF1
Ordering code	B88069X2711B502	B88069X8431B502
Electrodes/ diameter	Nickel/ 8.0 mm	Copper/ 5.0 max
Plating layer of electrodes	Nickel	Tin
Overall tube length	13.4 mm max	10.5 mm max
Center wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Failsafe clip	CuBe2	K55 (CuNi3Si1Mg)
Failsafe melting material	Solder pill/ 198°C	PEN (transparent / 260°C
Failsafe mounting	Pressing	Laser welding
Marking	EPCOS 43 (4: Failsafe position, 3: Lead configuration) C 230 YY M O (YY: Year, M: Month)	EPCOS 13 (1: Failsafe position, 3: Lead configuration) EB 230 YY M O (YY: Year, M: Month)
Dimensional drawing		

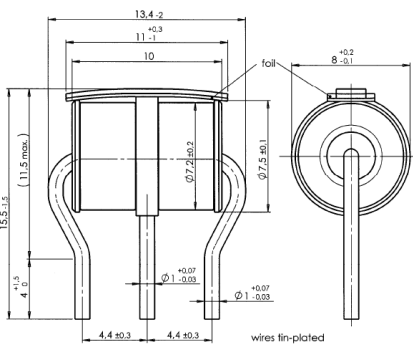
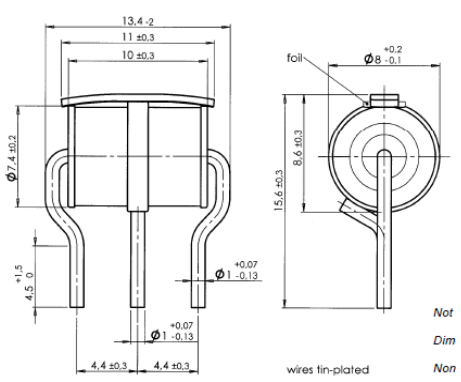
**Changes from ET3-A230XF1 to T83-A230XF1**

	Current	New
Type	ET3-A230XF1	T83-A230XF1
Ordering code	B88069X4150B502	B88069X9420B502
Overall height	16.6 max	16.5 max
Center wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Marking	ET 230 YY O (YY: Year)	230 YY O (YY: Year)
Dimensional drawing	 <p>electrodes nickel-plated wires and clip tin-plated</p>	 <p>wires tin-plated</p>

**Changes from ET5-A230X to ET5-A230X (new)**

	Current	New
Type	ET5-A230X	ET5-A230X
Ordering code	B88069X6371B502	B88069X6371B502
Center electrode/ diameter	Nickel/ 8.0 mm	Copper/ 8.0 mm
Terminal electrodes/ diameter	Nickel/ 7.2 mm	Copper/ 8.0 mm
Terminal electrode design	Without welding pin	With welding pin
Plating layer of electrodes	Nickel	Tin
Overall length	11.3 mm	11.2 mm
Packing	Tray/ 500 pieces with 5 trays, 100 pieces per tray	Collective/ 2000 pieces in 2 bags, 1000 pieces per bag
Dimensional drawing		

**Changes from EL3-A230XF1 to TC83-A230XF1**

	Current	New
Type	EL3-A230XF1	TC83-A230XF1
Ordering code	B88069X6091B502	B88069X5611B502
Electrodes/ diameter	Nickel/ 7.5 mm	Copper/ 7.4 mm
Plating layer of electrodes	Nickel	Tin
Center wire	Tin-plated copper clad steel wire	Tin-plated copper wire
Center wire welding	Butt welding	Tangential welding
Failsafe foil/ melting temp.	PP (white)/ 140°C	Hostaphan RN50 (Red)/ 260°C
Marking	EL 230 YY O (YY: Year)	230 YY O (YY: Year)
Dimensional drawing	 <p>Technical drawing of the EL3-A230XF1 component. It shows a side view and a top view. Dimensions include: total length 13.4 ± 0.2, electrode length 11 ± 0.3, electrode diameter 7.5 ± 0.1, foil diameter 8 ± 0.1, center wire diameter 1 ± 0.03, and base diameter 4.4 ± 0.3. The drawing is labeled 'wires tin-plated'.</p>	 <p>Technical drawing of the TC83-A230XF1 component. It shows a side view and a top view. Dimensions include: total length 13.4 ± 0.2, electrode length 11 ± 0.3, electrode diameter 7.4 ± 0.2, foil diameter 8 ± 0.1, center wire diameter 1 ± 0.13, and base diameter 4.4 ± 0.3. The drawing is labeled 'wires tin-plated'. A note indicates 'Not Dim Non'.</p>