

The header features the Bourns logo in white, bold, sans-serif font with a registered trademark symbol, positioned above a thin yellow horizontal line. Below the line, the words "Product Update Memo" are written in a large, white, sans-serif font. Underneath that, the words "OPTIMIZATION PLANS" are written in a smaller, white, all-caps, sans-serif font. The background is a blue gradient with faint, light-blue icons of various electronic components like resistors, capacitors, and integrated circuits.

**BOURNS®**

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**Product Update Memo**

**OPTIMIZATION PLANS**

July, 2016

## **Bourns Optimization Plan Updates**

Enclosed please find the most current Bourns Optimization Plans. Please review these sheets carefully so you are aware of products not recommended for new designs and note the dates for last order acceptance. Where available, alternatives are provided.



# Sensors/Controls Optimization Plan

July, 2016

Model	Size	Description	Type	2016		2017				2018				2019		Suggested Alternative
				3	4	1	2	3	4	1	2	3	4	1	2	
<i>NO PRODUCTS CURRENTLY SCHEDULED FOR PHASE-OUT.</i>																

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

- WW = Wirewound Precision Control
- HYB = Hybritron® Precision Control
- CP = Conductive Plastic Precision Control
- PC = Panel Control
- CE = Contacting Encoder
- OE = Optical Encoder
- TCD = Turns-Counting Dial
- SP = Slide Potentiometer

**Events** (occurs at end of indicated quarter):

- A = Develop worldwide conversion plan to alternative.
- B = Remove from new catalogs (increase price).
- C = Remove from selected distribution channel cost and stockable lists (increase resale price).
- D = Stop adding to MPOs.
- E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).
- F = Stop all orders except stock on hand.
- G = Stop production, dispose of inventory.

- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out



# Trimmer Optimization Plan

July, 2016

Model	Size	Description	Type	2016		2017				2018				2019		Suggested Alternative
				3	4	1	2	3	4	1	2	3	4	1	2	
<i>NO PRODUCTS CURRENTLY SCHEDULED FOR PHASE-OUT.</i>																

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

- MT = Multiturn
- ST = Single-Turn
- TH = Through-Hole
- SMT = Surface Mount

**Events** (occurs at end of indicated quarter):

- A = Develop worldwide conversion plan to alternative.
- B = Remove from new catalogs (increase price).
- C = Remove from selected distribution channel cost and stockable lists (increase resale price).
- D = Stop adding to MPOs.
- E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).
- F = Stop all orders except stock on hand.
- G = Stop production, dispose of inventory.

- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out



# Switch Optimization Plan

July, 2016

Model	Size	Description	Type	2016		2017				2018				2019		Suggested Alternative
				3	4	1	2	3	4	1	2	3	4	1	2	
<i>NO PRODUCTS CURRENTLY SCHEDULED FOR PHASE-OUT.</i>																

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Events** (occurs at end of indicated quarter):

A = Develop worldwide conversion plan to alternative.

B = Remove from new catalogs (increase price).

C = Remove from selected distribution channel cost and stockable lists (increase resale price).

D = Stop adding to MPOs.

E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).

F = Stop all orders except stock on hand.

G = Stop production, dispose of inventory.

Scheduled for 2016 phase-out

Scheduled for 2017 phase-out

Scheduled for 2018 phase-out

Scheduled for 2019 phase-out



# Chips, Arrays, Networks, Specialty & Power Resistors Optimization Plan

July, 2016

Model	Size	Description	Type	2016		2017				2018				2019		Suggested Alternative
				3	4	1	2	3	4	1	2	3	4	1	2	
CRP Series	0603-1206	Precision Chip Resistor	SMD	G												CRT
CRH Series	0603-1206	High Ohmic Chip Resistor	SMD	G												CR
PWR4522	11.45 x 5.5 mm	Fusible Safety Wirewound	TH		F		G									None
PWR4413B	11.43 x 13.5 x 0.8 mm	Bare Metal Shunt	TH		G											PWR4412-2SB
PWR4413C	15.24 x 16 x 1 mm	Bare Metal Shunt	TH		G											PWR4412-2SC
PWR4413D	20.32 x 26 x 1 mm	Bare Metal Shunt	TH		G											PWR4412-2SD
700 Series	10.11 - 40.59 x 8.5 x 3.81 mm	RC Terminator Networks	SIP		G											None
900 Series	10.2 - 35.6 x 5.08 x 3.81 mm	Capacitor Networks	SIP		G											None
CHF Series	10 - 1000 W	RF Power Resistors	FL/CH		G											None

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

- SIP = Single In-line Package
- DIP = Dual In-line Package
- SMD = Surface Mount Device
- 2NBS/2QSP = Thinfilm
- T0220 = T0220 Style Housing
- T0221 = T0221 Style Housing
- FL/CH = Flanged/Chip

**Events** (occurs at end of indicated quarter):

- A = Develop worldwide conversion plan to alternative.
- B = Remove from new catalogs (increase price).
- C = Remove from selected distribution channel cost and stockable lists (increase resale price).
- D = Stop adding to MPOs.
- E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).
- F = Stop all orders except stock on hand.
- G = Stop production, dispose of inventory.

Scheduled for 2016 phase-out
Scheduled for 2017 phase-out
Scheduled for 2018 phase-out
Scheduled for 2019 phase-out



# Magnetics Optimization Plan

July, 2016

Model	Description	Type	2016		2017		2018				2019		Suggested Alternative	
			3	4	1	2	3	4	1	2	3	4		
4588-RC	Axial Lead RF Chokes	PC		F		G								None
4600 Series	Varnished Chokes (Except: 4602-RC to 4612-RC)	PC		F		G								None
5500 Series	High Current Chokes	PC	F		G									None
5600 Series	High Current Chokes	PC		F		G								1130 Series, 1140 Series
5800-TR Series	High Current Chokes (Tape & Reel Package)	PC												5800
6300 Series	Varnished Chokes	PC		F		G								None
70F Series	Varnished Chokes (Except: 70F101AF-RC, 70F502AF-RC)	PC		F		G								None
74F Series	Varnished Chokes (Except: 74F686AP-3%-RC, 74F686AP-3%-TR-RC)	PC		F		G								None
LPV1620 Series	Radial Lead Power Inductors	PC	F		G									None
LPV1823 Series	Radial Lead Power Inductors	PC	F		G									None
LPV2023 Series	Radial Lead Power Inductors	PC	F		G									None
SRF2012 Series	Common Mode Chip Inductors	CI		F		G								SRF2012A Series, SRF2012AA Series
SRR0618 Series	Shielded Power Inductors	PC		F		G								None

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

- CI = Chip Inductor
- PC = Power Inductor
- CMC = Common Mode Choke
- T = Transformer
- CB = Chip Bead

**Events** (occurs at end of indicated quarter):

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- E = Remove from industrial/resale price list; issue supplemental price list; publish last order date (increase price, internal).
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- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out



# Multifuse® PTC Optimization Plan

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative
			3	4	1	2	3	4	1	2	3	4	1	2	
<i>NO PRODUCTS CURRENTLY SCHEDULED FOR PHASE-OUT.</i>															

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

- R = Radial Leaded
- S = Strap
- SMT = Surface Mount

**Events** (occurs at end of indicated quarter):

- A = Develop worldwide conversion plan to alternative.
- B = Remove from new catalogs (increase price).
- C = Remove from selected distribution channel cost and stockable lists (increase resale price).
- D = Stop adding to MPOs.
- E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).
- F = Stop all orders except stock on hand.
- G = Stop production, dispose of inventory.

- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out



# Semiconductor Products Optimization Plan

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative
			3	4	1	2	3	4	1	2	3	4	1	2	
CD0603-B00340	Chip Diode	CD		E,F	G										
CD0603-B0130	Chip Diode	CD		E,F	G										
CD0603-B0130L	Chip Diode	CD		E,F	G										
CD0603-B0140L	Chip Diode	CD		E,F	G										
CD0603-B0140R	Chip Diode	CD		E,F	G										
CD0603-B0230	Chip Diode	CD		E,F	G										
CD0603-B0240	Chip Diode	CD		E,F	G										
CD0603-S0180	Chip Diode	CD		E,F	G										
CD0603-S0180R	Chip Diode	CD		E,F	G										
CD0603-T05C	Chip Diode	CD		E,F	G										
CD0603-T12C	Chip Diode	CD		E,F	G										
CD0603-T24C	Chip Diode	CD		E,F	G										
CD0603-Z10	Chip Diode	CD		E,F	G										
CD0603-Z11	Chip Diode	CD		E,F	G										
CD0603-Z12	Chip Diode	CD		E,F	G										
CD0603-Z13	Chip Diode	CD		E,F	G										
CD0603-Z15	Chip Diode	CD		E,F	G										
CD0603-Z16	Chip Diode	CD		E,F	G										
CD0603-Z18	Chip Diode	CD		E,F	G										
CD0603-Z2	Chip Diode	CD		E,F	G										
CD0603-Z20	Chip Diode	CD		E,F	G										
CD0603-Z22	Chip Diode	CD		E,F	G										
CD0603-Z24	Chip Diode	CD		E,F	G										
CD0603-Z27	Chip Diode	CD		E,F	G										
CD0603-Z2V2	Chip Diode	CD		E,F	G										
CD0603-Z2V4	Chip Diode	CD		E,F	G										
CD0603-Z2V7	Chip Diode	CD		E,F	G										
CD0603-Z3	Chip Diode	CD		E,F	G										
CD0603-Z30	Chip Diode	CD		E,F	G										
CD0603-Z33	Chip Diode	CD		E,F	G										
CD0603-Z36	Chip Diode	CD		E,F	G										
CD0603-Z39	Chip Diode	CD		E,F	G										
CD0603-Z3V3	Chip Diode	CD		E,F	G										
CD0603-Z3V6	Chip Diode	CD		E,F	G										
CD0603-Z3V9	Chip Diode	CD		E,F	G										
CD0603-Z4V3	Chip Diode	CD		E,F	G										
CD0603-Z4V7	Chip Diode	CD		E,F	G										
CD0603-Z5V1	Chip Diode	CD		E,F	G										
CD0603-Z5V6	Chip Diode	CD		E,F	G										
CD0603-Z6V2	Chip Diode	CD		E,F	G										
CD0603-Z6V8	Chip Diode	CD		E,F	G										
CD0603-Z7V5	Chip Diode	CD		E,F	G										

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# Semiconductor Products Optimization Plan (Continued)

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative	
			3	4	1	2	3	4	1	2	3	4	1	2		
CD0603-Z8V2	Chip Diode	CD		E,F	G											
CD0603-Z9V1	Chip Diode	CD		E,F	G											
CD1005-B00340	Chip Diode	CD		E,F	G											
CD1005-B0130	Chip Diode	CD		E,F	G											
CD1005-B0130L	Chip Diode	CD		E,F	G											
CD1005-B0140L	Chip Diode	CD		E,F	G											
CD1005-B0140R	Chip Diode	CD		E,F	G											
CD1005-B0230	Chip Diode	CD		E,F	G											
CD1005-B0240	Chip Diode	CD		E,F	G											
CD1005-B0520	Chip Diode	CD		E,F	G											
CD1005-S01575	Chip Diode	CD		E,F	G											
CD1005-S0180	Chip Diode	CD		E,F	G											
CD1005-S0180R	Chip Diode	CD		E,F	G											
CD1005-T05C	Chip Diode	CD		E,F	G											
CD1005-T12C	Chip Diode	CD		E,F	G											
CD1005-T24C	Chip Diode	CD		E,F	G											
CD1005-Z10	Chip Diode	CD		E,F	G											
CD1005-Z11	Chip Diode	CD		E,F	G											
CD1005-Z12	Chip Diode	CD		E,F	G											
CD1005-Z13	Chip Diode	CD		E,F	G											
CD1005-Z15	Chip Diode	CD		E,F	G											
CD1005-Z16	Chip Diode	CD		E,F	G											
CD1005-Z18	Chip Diode	CD		E,F	G											
CD1005-Z2	Chip Diode	CD		E,F	G											
CD1005-Z20	Chip Diode	CD		E,F	G											
CD1005-Z22	Chip Diode	CD		E,F	G											
CD1005-Z24	Chip Diode	CD		E,F	G											
CD1005-Z27	Chip Diode	CD		E,F	G											
CD1005-Z29	Chip Diode	CD		E,F	G											
CD1005-Z2V2	Chip Diode	CD		E,F	G											
CD1005-Z2V4	Chip Diode	CD		E,F	G											
CD1005-Z2V7	Chip Diode	CD		E,F	G											
CD1005-Z3	Chip Diode	CD		E,F	G											
CD1005-Z30	Chip Diode	CD		E,F	G											
CD1005-Z33	Chip Diode	CD		E,F	G											
CD1005-Z36	Chip Diode	CD		E,F	G											
CD1005-Z39	Chip Diode	CD		E,F	G											
CD1005-Z3V3	Chip Diode	CD		E,F	G											
CD1005-Z3V6	Chip Diode	CD		E,F	G											
CD1005-Z3V9	Chip Diode	CD		E,F	G											
CD1005-Z4V3	Chip Diode	CD		E,F	G											
CD1005-Z4V7	Chip Diode	CD		E,F	G											
CD1005-Z5V1	Chip Diode	CD		E,F	G											
CD1005-Z5V6	Chip Diode	CD		E,F	G											
CD1005-Z6V2	Chip Diode	CD		E,F	G											
CD1005-Z6V8	Chip Diode	CD		E,F	G											

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# Semiconductor Products Optimization Plan (Continued)

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative
			3	4	1	2	3	4	1	2	3	4	1	2	
CD1005-Z7V5	Chip Diode	CD		E,F	G										
CD1005-Z8V2	Chip Diode	CD		E,F	G										
CD1005-Z9V1	Chip Diode	CD		E,F	G										
CD1607-B140LF	Chip Diode	CD		E,F	G										
CD1607-B140LLF	Chip Diode	CD		E,F	G										
CDDFN2-T12C	Chip Diode	CD		E,F	G										
CDDFN2-T24C	Chip Diode	CD		E,F	G										
CDDFN2-T4.7C	Chip Diode	CD		E,F	G										
CDDFN2-T5.0C	Chip Diode	CD		E,F	G										
CDSOT23-S2004	Chip Diode	CD		E,F	G										
CDSOT563-T05C	Chip Diode	CD		E,F	G										
CDWBS16-PLC01-6	Chip Diode	CD	B,D	E,F	G										
PN-DESIGNKIT-36	VDSL Driver Side Protection PortNote® Solution Design Kit	KIT	E,F		G										PN-DESIGNKIT-58 or PN-DESIGNKIT-59
TISP4C015L1NR-S	Thyristor Surge Protector	TSP	E,F		G										
TISP4C020L1NR-S	Thyristor Surge Protector	TSP	E,F		G										
TISP4C025L1NR-S	Thyristor Surge Protector	TSP	E,F		G										
TISP4C035L1NR-S	Thyristor Surge Protector	TSP	E,F		G										
TISP6NTP2ADR-S	Thyristor Surge Protector	TSP	G												
TISP4300MMAJR-S	Thyristor Surge Protector	TSP	G												
TISP4300MMBJR-S	Thyristor Surge Protector	TSP	G												
TISP4350MMAJR-S	Thyristor Surge Protector	TSP	G												
TISP4350MMBJR-S	Thyristor Surge Protector	TSP	G												
TISP4360MMAJR-S	Thyristor Surge Protector	TSP	G												
TISP4360MMBJR-S	Thyristor Surge Protector	TSP	G												
TISP61089BGDR-S	Thyristor Surge Protector	TSP	G												
TISP61511DR-S	Thyristor Surge Protector	TSP	G												

## Note:

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

## Type Codes:

CD = Chip Diode  
 TBU = TBU® HSP Product  
 TSP = TISP® Product  
 KIT = Design Kit

## Events (occurs at end of indicated quarter):

A = Develop worldwide conversion plan to alternative.  
 B = Remove from new catalogs (increase price).  
 C = Remove from selected distribution channel cost and stockable lists (increase resale price).  
 D = Stop adding to MPOs.  
 E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).  
 F = Stop all orders except stock on hand.  
 G = Stop production, dispose of inventory.

Scheduled for 2016 phase-out

Scheduled for 2017 phase-out

Scheduled for 2018 phase-out

Scheduled for 2019 phase-out

# BOURNS®

## GDT Optimization Plan

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative
			3	4	1	2	3	4	1	2	3	4	1	2	
<i>NO PRODUCTS CURRENTLY SCHEDULED FOR PHASE-OUT.</i>															

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

GDT = Gas Discharge Tube

**Events** (occurs at end of indicated quarter):

- A = Develop worldwide conversion plan to alternative.
- B = Remove from new catalogs (increase price).
- C = Remove from selected distribution channel cost and stockable lists (increase resale price).
- D = Stop adding to MPOs.
- E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).
- F = Stop all orders except stock on hand.
- G = Stop production, dispose of inventory.

- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out



# Metal Oxide Varistor (MOV) Optimization Plan

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative
			3	4	1	2	3	4	1	2	3	4	1	2	
<i>NO PRODUCTS CURRENTLY SCHEDULED FOR PHASE-OUT.</i>															

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

MOV = Metal Oxide Varistor

**Events** (occurs at end of indicated quarter):

A = Develop worldwide conversion plan to alternative.

B = Remove from new catalogs (increase price).

C = Remove from selected distribution channel cost and stockable lists (increase resale price).

D = Stop adding to MPOs.

E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).

F = Stop all orders except stock on hand.

G = Stop production, dispose of inventory.

- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out



# ChipGuard® ESD Suppressor Optimization Plan

July, 2016

Model	Description	Type	2016		2017				2018				2019		Suggested Alternative	
			3	4	1	2	3	4	1	2	3	4	1	2		
CG0402MLA-14KG	ChipGuard® ESD Suppressor 0402 VDC 14V	CG	G													
CG0603MLA-14KE	ChipGuard® ESD Suppressor 0603 VDC 14V	CG	G													

**Notes:**

Any models appearing on this plan are considered mature, are not recommended for new designs and are marked as such on the web site.

**Type Codes:**

CG = ChipGuard® ESD Suppressor

**Events** (occurs at end of indicated quarter):

- A = Develop worldwide conversion plan to alternative.
- B = Remove from new catalogs (increase price).
- C = Remove from selected distribution channel cost and stockable lists (increase resale price).
- D = Stop adding to MPOs.
- E = Remove from industrial/resale price list: issue supplemental price list; publish last order date (increase price, internal).
- F = Stop all orders except stock on hand.
- G = Stop production, dispose of inventory.

- Scheduled for 2016 phase-out
- Scheduled for 2017 phase-out
- Scheduled for 2018 phase-out
- Scheduled for 2019 phase-out