



Reliable Electronic Solutions

## LEAD-FREE & RoHS-COMPLIANT COMPONENTS ROADMAP

Lead-free refers to plating and solder composition.

**RoHS-compliant refers to no Pb, Cd, Cr+6, Hg, PBB or PBDE unless use exempted or within allowable limits.**

Bourns Product Line	RoHS-compliant (**assuming Pb-free solder/plating option used, if applicable)	Models available with Pb-free <u>OR</u> Pb solder/plating options	RoHS/Lead-Free Part Numbering, if applicable. Suffix:	RoHS/Lead-Free compliant Availability Target	No Plans to Offer Lead-Free Version at this Time
CAT	Yes**	•	LF		
CAY	Yes **	•	LF		
Chip Beads MA, MH, MG, MU, MT, MZ	Yes		No Suffix		
Chip Diodes CD0603, 0805, 1005, 1206	Yes		No suffix		
Chip Diodes CD214A, 214B, 214C, 216A, 1607	Yes**	•	LF		
ChipGuard® (CG Series) MLA, MLC, MLD, MLE	Yes				
Chip Inductors CM, CC series	Yes**	CM45 only	L		
Chip Inductors CF, CI, CS and CW Series	Yes		No Suffix		
CR Series	Yes**	•	LF		
DC-DC Converters				Q1 2006	
Dials: CT-23, CT-26, H-22, H-23, H-46, H-491, H-492, H-493, H-494, H-506, H550	Yes		No suffix		
Encoders: 3315, EAW	Yes**		L		
EC, EM14, EC11, PEC12, PEC16	Yes		No suffix		
EN	No		L	Q3 2005	
EPS, ES	No		L	Q2 2005	
Fuel Cards (3714 Series)	Yes**	•			
GDT (20xx)	Yes**	•	LF	Q2 2005	
Hybrids				Q1 2006	
Inductors (Through-hole) RLB, PT121, FSR, LPA and LPV	Yes**	•	L		
Integrated Passive & Active Devices (Chip Scale Packaging (CSP))	Yes**	•	LF		
Integrated Passive & Active Devices (QSOP, NSOIC packaging)	Yes**	•	LF		
Line Protection Modules (Surge Networks)				Q1 2006	
Linear Motion Potentiometers 3046, 3048	Yes		No suffix		
MF-LR and MF-LS	Yes		No suffix		
MF-MSMD	No				Note 1
MF-MSMF, MF-NSMF	Yes		No suffix		
MF-R	Yes		-99 (note 6)		
MF-R/90, R/600	Yes		No suffix		
MF-RX	No				Note 1
MF-RX/72, RX/250	Yes		No suffix		
MF-S and MF-SVS	Yes				
MF-SM	Yes		-99 (note 6)		
MF-SMDF	Yes		No suffix		

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MF-SMHT	Yes		No suffix		
MF-USMD	No				Note 1
MF-USMF	Yes		No suffix		
MF-VS and MF-VSN	Yes				
Modular Contacts	Yes				
Networks (model 4600X, M, H; 4800P)	Yes**	•	LF		
Networks (models 4100R, 4300H, M, R)	Yes**	•	LF		
Networks (models 4100T; 4300K,S,T; 4400T, 4800T)	Yes	•	L		
Networks (model 4400P)	Yes		LF		
Panel Controls (Single Turn) 39	Yes		No suffix		
51, 52, 53	No		L	Q2 2005	
81, 82, 85, 86 (Cermet)	No		L	Q3 2005	
81, 82, 85, 86 (Conductive Plastic)	Yes		No suffix		
83, 84	No		L	Q3 2005	
91, 92, 93, 94, 95, 96, 99 (Cermet)	No		L	Q2 2005	
91, 92, 93, 94, 95, 96, 99 (Conductive Plastic)	Yes		No suffix		
PC	No		L	Q3 2005	
PDA17, PDB12, PDB18, PDV, PTA, PTB, PTD90, PTR90, PTT111, PTV09, PTV111, PTV142	Yes		No suffix		
3310	Yes		L		
3851, 3852, 3856, 3862	No		L	Q4 2005	
Panel Controls (Multi-turn) 83, 84	No		L	Q2 2005	
Power Chokes (non-shielded) SDRxxxx Series (excluding those below)	Yes**	•	L		
Power Chokes (non shielded) SDRxxxx series: 1030, 1045, 1305, 7030, 7045	Yes		No suffix		
Power Chokes (shielded) SRRxxxx Series excl. those below	Yes		No suffix		
Power Chokes (shielded) SRR Series: 0603, 0604, 0618, 0906, 0908, 1205, 1206, 1208, 1305, 3011, 4011, 6603	Yes**	•	L		
Power Chokes (shielded) SRUxxxx Series	Yes		No suffix		
Precision Potentiometers (Digital Push Button) 3680 series	No		L	Q3 2005	
Precision Potentiometers (Multi-turn) 3600, 3610	No				Will be phased out – no replacement
3400, 3500, 3501,3540, 3541, 3543, 3545, 3700, 3701, 3750, 3751	No		L	Q3 2005	
3549, 3590	Yes		No suffix		
Precision Potentiometers (Single turn) 3435, 6534, 6537, 6538, 6539, 6574, 6637, 6638, 6639, 6657, 6674	Yes		No suffix		
Slide Controls – PDV, PTA, PTB	Yes		No suffix		

Bourns Product Line	RoHS-compliant (**assuming Pb-free solder/plating option used, if applicable)	Models available with Pb-free OR Pb solder/plating options	RoHS/Lead-Free Part Numbering, if applicable.  Suffix:	RoHS/Lead-Free compliant Availability Target	No Plans to Offer Lead-Free Version at this Time
<a href="#">Switches</a> (DIP) SDHH, SDM, SND	Yes				
<a href="#">Switches</a> (Rotary) 7813, 7814, 7829	Yes (note 2)				
<a href="#">Switches</a> (Tact) 7914	Yes				
<a href="#">Switches</a> (Tact) SDT, SDTM, STW, STJN-4, STJN-5, STSM	Yes				
Telefuse™ B1250T and B0500T Series	Yes				
Transformers SM-LP5001E	Yes**	•	L		
Trimmers – Consumer (Surface Mount Cermet) 3302, 3303, 3364, TC03, TC22, TC33, TC86, TC89	Yes		No suffix		
Trimmers – Consumer (Surface Mount Cermet) TC22, TC33	Yes		No suffix		
Trimmers – Consumer (Surface Mount Carbon) TC73	Yes		No suffix		
Trimmers – Consumer (Through Hole Cermet) 3306, 3309	Yes		No suffix	June 2005	
Trimmers – Consumer (Through Hole Carbon) 3318, 3319	Yes		No suffix		
Trimmers – Industrial (Surface Mount) 3269, 3361	Yes** (note 2)	•	LF		
Trimmers – Industrial (Surface Mount) 3214, 3223, 3224, 3313, 3314	Yes (note 2)		No suffix		
Trimmers – Industrial (Through Hole Cermet) 20, 3006, 3009, 3059, 3082, 3252, 3262, 3266, 3269, 3292, 3296, 3299, 3329, 3339, 3352, 3362, 3386	Yes** (note 2)	•	LF		
Trimmers – Industrial (Through Hole Wirewound) 3005, 3057, 3250, 3260, 3290, 3345	Yes				
Trimmers – Military (Cermet) RJ12, RJ22, RJ24, RJR24, RJ26, RJR26, RJ50, RJR50					•
Trimmers – Military (Wirewound) RT12, RT22, RTR22, RT24, RTR24, RT26, RTR26					•
TISP1xxxH3BJR, TISP3xxxT3BJR, TISP4xxxxxBJR, TISP4xxxxxAJR, TISP5xxxH3BJR	Yes**	•	-S		
TISPxxxxDR, TISPxxxxSL	Yes**	•	-S		
TISP4xxxxLM, TISPxxxxLMR	Yes**	•	-S		
TISP1xxxF3P, TISP3xxxF3P, TISP7xxxF3P	Yes**	•	-S		
BDxxx, BDxxxx, BDTxx, BDTxxx, BDVxx, BDVxxx, BDWxx, BDWxxx, BDxxx, BDxxxx	Yes**	•	-S		
BUxxx, BUTxx, BUVxx, BUXxx	Yes**	•	-S		
TIPxx, TIPxxx, TIPLxxx, TIPLxxxx, TIPPxx, TIPPxxx	Yes**	•	-S		
TICxxx, TICPxxx	Yes**	•	-S		
BULxxx, Y1112, Y1112L	Yes**	•	-S		
TISP6xxxxHDMR, TISP9xxxxLDMR	Yes (Note 4)		-S		
TISP4xxxxxBJR, TISP4CxxxxxBJR, TISP4xxxxxLMFR	Yes**	•	S (Note 5)		

- 1 Existing designs will not change to lead-free; lead-free equivalent parts for MSMD are offered as MF-MSMF; lead-free equivalent for USMD are offered as USMF (only selected models); and lead-free equivalents to MF-RX are offered as to MF-RX/72.
- 2 Cadmium oxide glass is used in some resistor/conductor inks. Cd-free inks will be used in all Trimmer LF models starting March 1, 2005 with date code 0509. Trimmers Industrial (Surface Mount) 3214, 3223, 3224, 3313, 3314 are cadmium free after date code 0509.
- 3 Models 4400P and 4400T will not longer be available with Sn/Pb plated terminations after January 2005.
- 4 Models TISP6xxxxHDMR and TISP9xxxLDMR available with lead-free terminations only.
- 5 For lead-free models with part numbers of 14 characters please use S suffix only.
- 6 MF parts manufactured after March 31, 2005 will be lead-free. Therefore, the -99 suffix is still necessary to ensure a RoHS compliant product is shipped each time as product can be shipped at any time from stock manufactured before March 31, 2005. The -99 suffix also acts as a part number differentiator between lead and lead-free product.