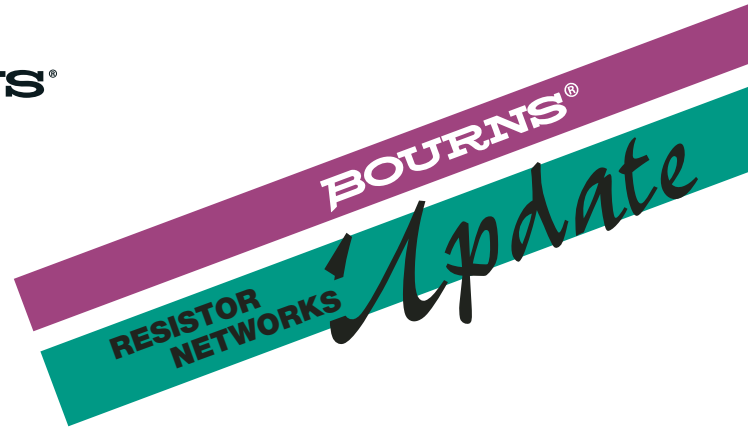




November, 2004

Bourns Rep District Sales Managers
Bourns Rep Distributor Managers
Corporate Distributor Product Managers
Americas Sales Team
Asia Sales Team
Europe Sales Team



All Bourns® Resistor Networks Product Line Offering to be Lead Free by January, 2005

Bourns will complete the transition of its resistor networks to lead free versions in January 2005. All Models – 4100, 4300, 4400, 4600, and 4800 – will be available in a version that is lead free per RoHS requirements. Each data sheet will note that the lead free version is RoHS compliant.

The lead free version will be indicated by the addition of an “LF” suffix for thick-film-on-ceramic networks and an “L” suffix for thin-film-on-ceramic-networks. A “Roadmap of Conversion of Chip Arrays, Chip Resistors, and Resistor Networks to Lead Free” is included as a summary of availability and as a specific reference that explains to which models the “LF” and “L” should be added to indicate lead free (see page 2).

There have been questions about the reverse compatibility of lead free products to processes that were used with tin-lead terminations. We have also included the “Bourns Minimum Soldering Profile for Lead Free Chip Resistors, Chip Arrays, and Resistor Networks with 63Sn/37Pb Solder Paste” (see page 3). This profile details the minimum soldering conditions to which we have tested lead free parts with tin-lead solder. At the minimum conditions noted, reflow and acceptable bonding was achieved in low-volume testing.

Pricing and lead time for resistor networks with lead free terminations will remain the same as pricing and lead time for networks with tin-lead terminations.

Roadmap of Conversion of Chip Arrays, Chip Resistors, and Resistor Networks to Lead Free

Model	Type	When Available in Lead Free?	Suffix to P/N To Indicate Lead Free	Still Available With Tin-Lead Terminations?	*Lead Free Compatible With Tin-lead Process (+225 °C)
CAT10-J4	Chip Array	Now	"LF"	Yes	Yes
CAT16-F4	Chip Array	Now	"LF"	Yes	Yes
CAT16-J2	Chip Array	Now	"LF"	Yes	Yes
CAT16-J4	Chip Array	Now	"LF"	Yes	Yes
CAT16-J8	Chip Array	Now	"LF"	Yes	Yes
CAT25-JA	Chip Array	Now	"LF"	Yes	Yes
CAY10-J2	Chip Array	Now	"LF"	Yes	Yes
CAY10-J4	Chip Array	Now	"LF"	Yes	Yes
CAY16-F4	Chip Array	Now	"LF"	Yes	Yes
CAY16-J2	Chip Array	Now	"LF"	Yes	Yes
CAY16-J4	Chip Array	Now	"LF"	Yes	Yes
CAY16-J8	Chip Array	Now	"LF"	Yes	Yes
CAY17-JA/JB	Chip Array	Now	"LF"	Yes	Yes
CR0402	Chip Resistor	Now	"LF"	Yes	Yes
CR0603	Chip Resistor	Now	"LF"	Yes	Yes
CR0805	Chip Resistor	Now	"LF"	Yes	Yes
CR1206	Chip Resistor	Now	"LF"	Yes	Yes
CR2010	Chip Resistor	Now	"LF"	Yes	Yes
CR2512	Chip Resistor	Now	"LF"	Yes	Yes
CRH0603	Chip Resistor	Now	"LF"	Yes	Yes
CRH0805	Chip Resistor	Now	"LF"	Yes	Yes
CRH1206	Chip Resistor	Now	"LF"	Yes	Yes
CRL0603	Chip Resistor	Now	"LF"	Yes	Yes
CRL0805	Chip Resistor	Now	"LF"	Yes	Yes
CRL1206	Chip Resistor	Now	"LF"	Yes	Yes
CRL2010	Chip Resistor	Now	"LF"	Yes	Yes
CRL2512	Chip Resistor	Now	"LF"	Yes	Yes
CRP0603	Chip Resistor	Now	"LF"	Yes	Yes
4100R	Resistor Network	January 2005	"LF"	Yes	Yes
4100T	Resistor Network	January 2005	"L"	Yes	Yes
4300H	Resistor Network	January 2005	"LF"	Yes	Yes
4300K	Resistor Network	January 2005	"L"	Yes	Yes
4300M	Resistor Network	January 2005	"LF"	Yes	Yes
4300R	Resistor Network	January 2005	"LF"	Yes	Yes
4300S	Resistor Network	January 2005	"L"	Yes	Yes
4300T	Resistor Network	January 2005	"L"	Yes	Yes
4400P	Resistor Network	January 2005	"LF"	Not after January 2005	Yes
4400T	Resistor Network	January 2005	"L"	Not after January 2005	Yes
4600H	Resistor Network	Now	"LF"	Yes	Yes
4600M	Resistor Network	Now	"LF"	Yes	Yes
4600X	Resistor Network	Now	"LF"	Yes	Yes
4800P	Resistor Network	Now	"LF"	Yes	Yes
4800T	Resistor Network	January 2005	"L"	Yes	Yes

* See "Bourns Minimum Soldering Profile for Lead Free Chip Resistors and Arrays"

Bourns Minimum Soldering Profile for Lead Free Chip Resistors, Chip Arrays, and Resistor Networks with 63Sn/37Pb Solder Paste

