

LR Type Approval Certificate Extension

This is to certify that Certificate No. 95/00138(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Tyco Electronics
PLACE OF PRODUCTION	Raychem Products 300 Constitution Drive Menlo Park CA 94025 United States of America
DESCRIPTION	Raychem flame-retardant and flame retardant, zero-halogen heat-shrinkable multilegged transitions for cable breakouts.
TYPES	SSB, 302V, 402V, 502V and 705V
APPLICATION	Marine, offshore and industrial applications.
SPECIFIED STANDARDS	ASTM D635 BS G 198-5:1997 Type DF (material -100) IEC60754-2 (material -100) IEC60339 MIL-I-81765/1A (material -131)
SPECIFICATIONS	Temperature rating: Material -131 (flame-retardant) Operating temperature range: -55°C to +90°C Minimum recovery temperature: +120°C Material -100 (zero-halogen) Operating temperature range: -30°C to +105°C Minimum recovery temperature: +120°C Voltage rating: 1000V IP68 to IEC60529
Certificate No.	95/60138(E2)
Issue Date	17 December 2002
Expiry Date	23 October 2005
Sheet	1 of 3


J. Croston

SPECIFICATIONS (contd.) Material -100 acid gas test to IEC60754-2
 Mean pH value: 5.57
 Mean conductivity: 0.53 μ S/mm
 Pressure tested at 1.7bar (25psi) for 30minutes.

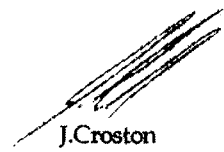
See also below

Type SSB flame-retardant heat-shrinkable multi-legged transitions (material -131).

Product dimensions:

Type	No. of legs	Expanded as supplied (min)		Recovered after heating (max)		Leg length (nom)(inch)	Base length (nom)(inch)
		I.D. base (inch)	I.D. legs (inch)	I.D. base (inch)	I.D. legs (inch)		
SSB-1202 FR	2	1.60	0.55	0.45	0.15	1.45	2.45
SSB-2002 FR	2	2.00	0.75	1.40	0.35	2.75	3.50
D3-9 FR	2	0.80	0.33	0.37	0.11	0.70	2.00
D14-30 FR	2	1.20	0.50	0.60	0.17	1.00	2.50
D50-100 FR	2	1.90	0.75	0.90	0.30	1.20	3.00
D200-400 FR	2	3.00	1.45	1.50	0.50	1.50	3.50
T3-9 FR	3	0.90	0.33	0.36	0.09	0.75	2.00
T14-23 FR	3	1.20	0.50	0.70	0.18	1.00	2.40
T14-50 FR	3	1.50	0.65	0.50	0.16	1.20	2.30
T42-100 FR	3	1.70	0.80	0.90	0.19	1.25	2.25
T150-300 FR	3	2.40	1.25	1.40	0.50	1.60	3.50
T400 FR	3	3.20	1.40	2.00	0.70	1.60	3.50
T500-600 FR	3	4.90	2.00	2.32	0.90	2.00	7.40
F3-9 FR	4	0.90	0.28	0.43	0.11	0.75	2.00
F23 FR	4	1.25	0.50	0.80	0.20	1.10	2.50
F42-60 FR	4	1.75	0.80	1.00	0.32	1.25	2.50
F75-100 FR	4	2.35	1.00	1.00	0.35	1.70	6.50
F133-200 FR	4	2.65	1.20	1.40	0.43	1.50	3.60
F150-400 FR	4	5.25	1.35	3.00	0.55	3.00	6.00
6S100-200 FR	6	2.40	0.80	1.45	0.35	2.75	3.40
8S23-75 FR	8	1.40	0.40	0.85	0.13	1.25	2.00
8S14-50 FR	8	2.25	0.56	0.85	0.13	1.25	2.00
8S42-100 FR	8	2.50	0.87	0.85	0.13	1.25	2.00

Certificate No. 95/60138(E2)
 Issue Date 17 December 2002
 Expiry Date 23 October 2005
 Sheet 2 of 3



J. Croston

Type 302V, 402V, 502V and 705V flame-retardant zero-halogen heat-shrinkable multi-legged transitions (material -100).

Product dimensions:

Type	No. of legs	Expanded as supplied (min)		Recovered after heating (max)		Leg length (nom)(inch)	Base length (nom)(inch)
		I.D. base (inch)	I.D. legs (inch)	I.D. base (inch)	I.D. legs (inch)		
302V111	2	1.60	0.55	0.45	0.15	1.45	2.45
302V163	2	2.00	0.75	1.40	0.35	2.75	3.50
402V101	3	0.90	0.33	0.36	0.09	0.75	2.00
402V121	3	1.20	0.50	0.70	0.18	1.00	2.40
402V142	3	1.70	0.80	0.90	0.19	1.25	2.25
402V163	3	2.40	1.25	1.40	0.50	1.60	3.50
402V185	3	3.20	1.40	2.00	0.70	1.60	3.50
402V196	3	4.90	2.00	2.32	0.90	2.00	7.40
502V132	4	1.25	0.50	0.80	0.20	1.10	2.50
502V153	4	1.75	0.80	1.00	0.32	1.25	2.50
502V163	4	2.65	1.20	1.40	0.43	1.50	3.60
705V174	6	2.40	0.80	1.45	0.35	2.75	3.40

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify LR of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 95/60138(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 95/00138(E1) to which this extension should be attached

Certificate No. 95/60138(E2)
 Issue Date 17 December 2002
 Expiry Date 23 October 2005
 Sheet 3 of 3


 J. Croston