

# DATA SHEET

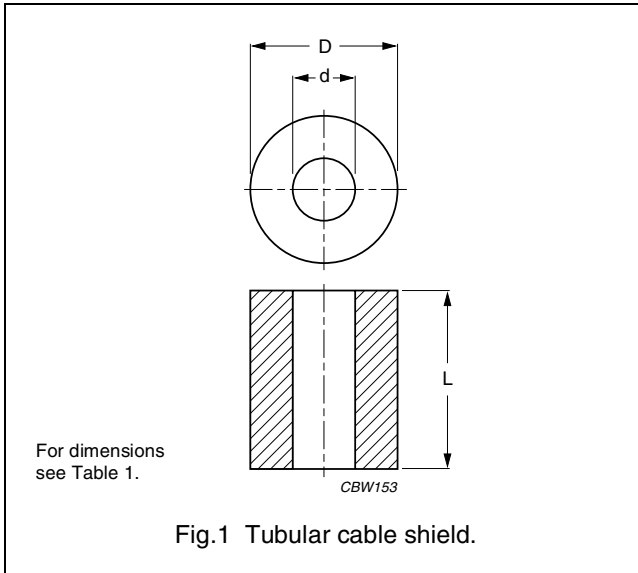
**Cable shields**  
**EMI-suppression products**

Supersedes data of September 2004

2008 Sep 01

**CABLE SHIELDS FOR EMI-SUPPRESSION**

**Tubular cable shields**



**Table 1** Type numbers, dimensions and parameters; see Fig.1

TYPE NUMBER	DIMENSIONS			Z <sub>typ</sub>   <sup>(1)</sup> (Ω) at	
	D	d	L	25 MHz	100 MHz
CST7.8/5.3/9.8-3S4 <b>des</b>	7.8 ±0.2	5.3 +0.3	9.8 ±0.2	33	50
CST8/5.3/10-3S4 <b>des</b>	8 -0.4	5.3 +0.3	10 -0.4	36 <sup>(2)</sup>	50
CST8.3/3.5/10-3S4 <b>des</b>	8.3 -0.4	3.5 +0.3	10 -0.6	70	96
CST9.5/4.8/4.8-4S2 <b>des</b>	9.5 ±0.25	4.75 ±0.25	4.8 ±0.2	18	35
CST9.5/4.8/6.4-4S2 <b>des</b>	9.5 ±0.25	4.75 ±0.25	6.35 ±0.35	23	50
CST9.5/4.8/9.5-4S2 <b>des</b>	9.5 ±0.25	4.75 ±0.15	9.5 ±0.3	40	70
CST9.5/4.8/10-4S2 <b>des</b>	9.5 ±0.25	4.75 ±0.15	10.4 ±0.25	53	80
CST9.5/4.8/13-4S2 <b>des</b>	9.5 ±0.25	4.75 ±0.15	12.7 ±0.5	60	95
CST9.5/4.8/19-4S2 <b>des</b>	9.5 ±0.25	4.75 ±0.15	19.05 ±0.7	100	145
CST9.5/5.1/15-3S4 <b>des</b>	9.5 ±0.3	5.1 ±0.15	14.5 ±0.45	66	110
CST9.5/5.1/15-4S2 <b>des</b>	9.5 ±0.3	5.1 ±0.15	14.5 ±0.45	66	110
CST9.7/5/5.1-4S2 <b>des</b>	9.65 ±0.25	5 ±0.2	5.05 -0.45	26	43
CST14/6.4/5.3-4S2 <b>des</b>	14.3 ±0.45	6.35 ±0.25	5.3 -0.45	35	60
CST14/6.4/10-4S2 <b>des</b>	14.3 ±0.45	6.35 ±0.25	10.1 ±0.4	70	105
CST14/6.4/14-4S2 <b>des</b>	14.3 ±0.45	6.35 ±0.25	13.8 ±0.4	90	150
CST14/6.4/15-4S2 <b>des</b>	14.3 ±0.45	6.35 ±0.25	15 ±0.45	100	170
CST14/6.4/29-4S2 <b>des</b>	14.3 ±0.45	6.35 ±0.25	28.6 ±0.75	170	250
CST14/7.3/29-4S2 <b>des</b>	14.3 ±0.45	7.25 ±0.15	28.6 ±0.75	143	215
CST16/7.9/14-4S2 <b>des</b>	16.25 -0.75	7.9 ±0.25	14.3 ±0.35	70	113
CST16/7.9/29-4S2 <b>des</b>	16.25 -0.75	7.9 ±0.25	28.6 ±0.75	130	213
CST17/9.5/13-3S4 <b>des</b>	17.45 ±0.35	9.53 ±0.25	12.7 ±0.5	55	90
CST17/9.5/13-4S2 <b>des</b>	17.45 ±0.4	9.5 ±0.25	12.7 ±0.5	55	88

## EMI-suppression products

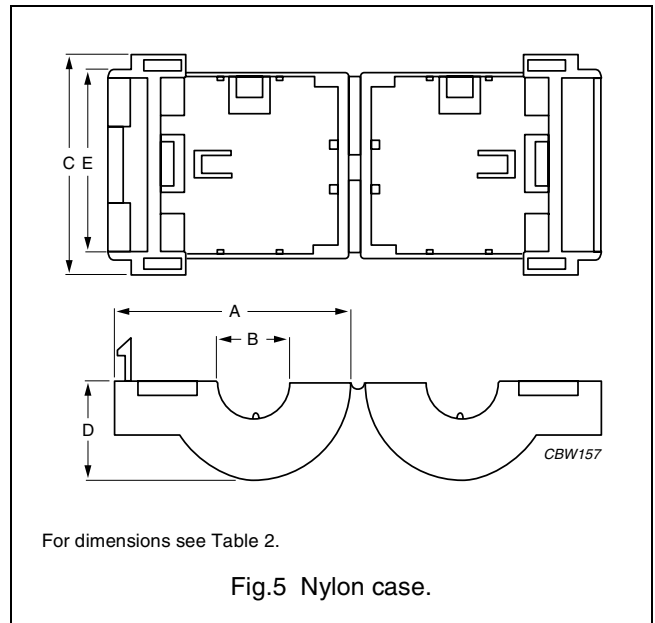
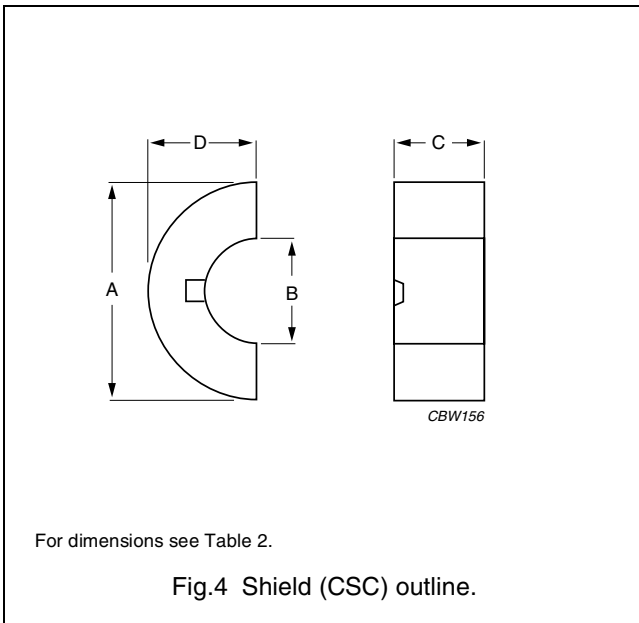
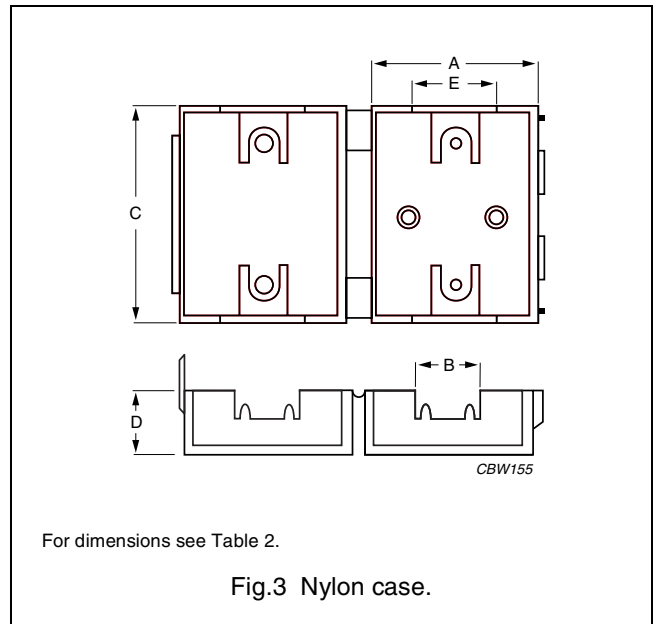
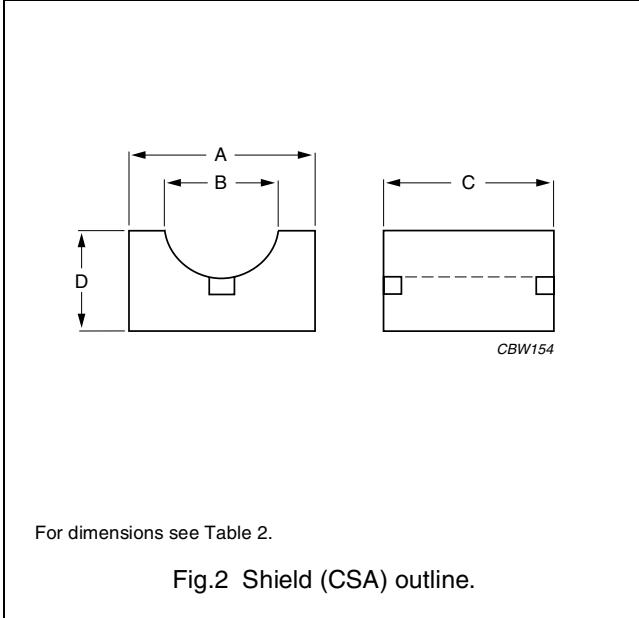
## Cable shields

TYPE NUMBER	DIMENSIONS			$ Z_{typ} ^{(1)}$ ( $\Omega$ ) at	
	D	d	L	25 MHz	100 MHz
CST17/9.5/29-3S4 <small>des</small>	17.45 $\pm$ 0.35	9.53 $\pm$ 0.25	28.55 $\pm$ 0.75	125	200
CST17/9.5/29-4S2 <small>des</small>	17.45 $\pm$ 0.35	9.53 $\pm$ 0.25	28.55 $\pm$ 0.75	125	250
CST17/11/60-3S4 <small>des</small>	17.2 -1.2	11 $\pm$ 0.5	60 -2.5	200	320
CST19/10/15-4S2 <small>des</small>	19 -0.65	10.15 $\pm$ 0.25	14.65 -0.75	70	110
CST19/10/29-4S2 <small>des</small>	19 -0.65	10.15 $\pm$ 0.25	28.6 $\pm$ 0.75	128	196
CST19/11/12-3S4 <small>des</small>	19 $\pm$ 0.4	10.6 $\pm$ 0.3	11.5 $\pm$ 0.4	50	75
CST26/13/21-4S2 <small>des</small>	25.9 $\pm$ 0.75	12.8 $\pm$ 0.25	21.3 $\pm$ 0.5	110	180
CST26/13/29-4S2 <small>des</small>	25.9 $\pm$ 0.75	12.8 $\pm$ 0.25	28.6 $\pm$ 0.8	145	225
CST29/19/7.5-4S2 <small>des</small>	29 $\pm$ 0.75	19 $\pm$ 0.5	7.5 $\pm$ 0.25	28	47

**Note**

1. Minimum guaranteed impedance is  $|Z|_{typ} -20\%$ .
2. At 30 MHz.

Round cable shields (split)











## EMI-suppression products

## Cable shields

## General data

ITEM	SPECIFICATION
Case material	polyamide (PA66), glass reinforced, flame retardant in accordance with "UL94V-0", grade A82, colour black

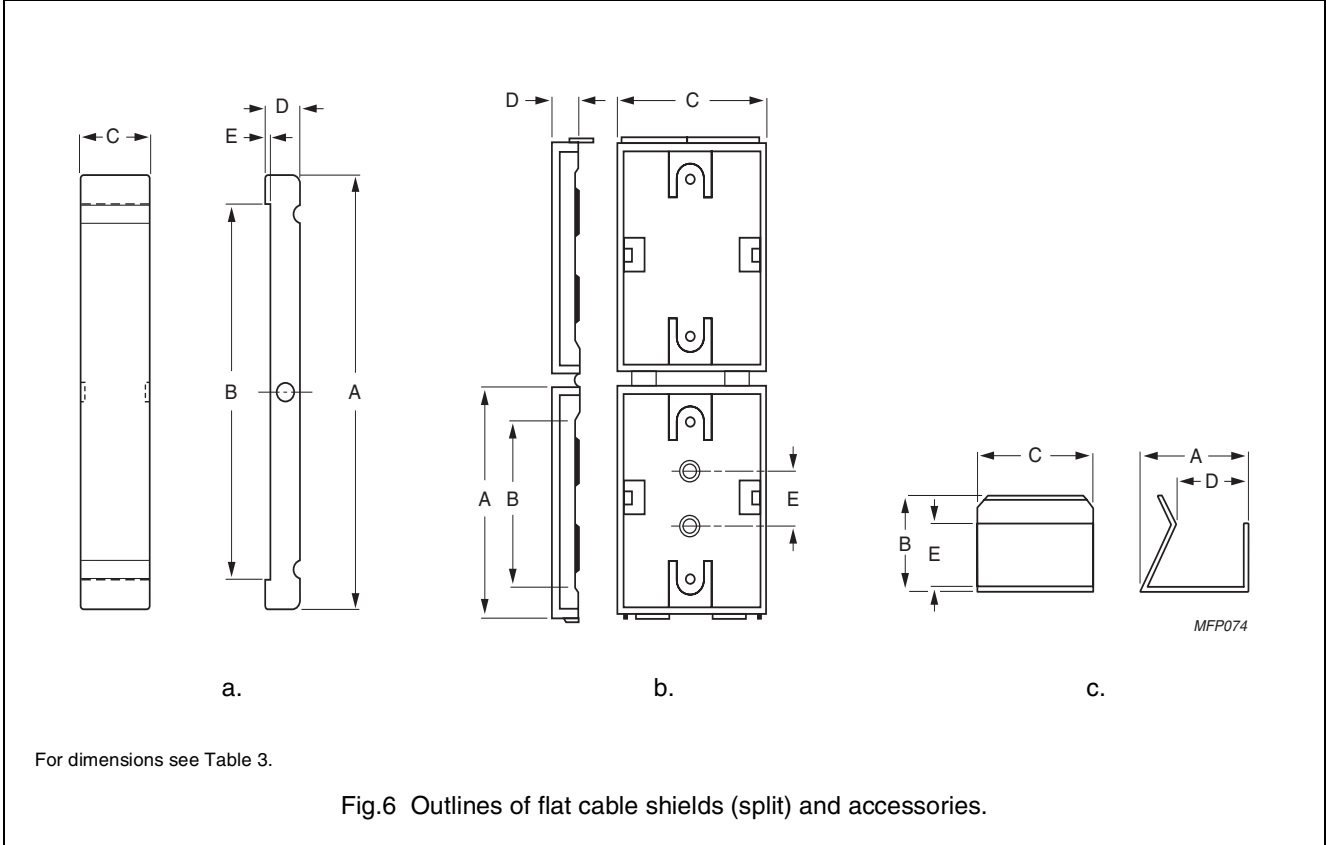
**Table 2** Type numbers, dimensions and parameters; see Figs 2 to 5

TYPE NUMBER	FIG.	DIMENSIONS					Z <sub>typ</sub>   <sup>(1)</sup> (Ω) at		
		A	B	C	D	E	25 MHz	100 MHz	
<b>Round cable shields</b>									
CSA15/7.5/29-4S2 	2	15 ±0.25	6.6 ±0.3	28.6 ±0.8	7.5 ±0.15	–	165	275	
CSA19/9.4/29-4S2 	2	18.65 ±0.4	10.15 ±0.3	28.6 ±0.8	9.4 ±0.15	–	140	225	
CSA26/13/29-4S2 	2	25.9 ±0.5	13.05 ±0.3	28.6 ±0.8	12.8 ±0.25	–	155	250	
CSC16/7.9/14-4S2 	4	15.9 ±0.4	7.9 ±0.3	14.3 ±0.4	7.95 ±0.2	–	50	113	
<b>Round cable shields in matching nylon cases</b>									
CSA15/7.5/29-4S2-EN 	2+3	17.9	7.0	32.3	9.2	9.0	165	275	
Nylon case	3	17.9	7.0	32.3	9.2	9.0	–	–	
CSA19/9.4/29-4S2-EN 	2+3	22.1	10.2	32.3	11.7	9.0	140	225	
Nylon case	3	22.1	10.2	32.3	11.7	9.0	–	–	
CSA26/13/29-4S2-EN 	2+3	29	13.4	32.5	14.8	18.0	155	250	
Nylon case	3	29	13.4	32.5	14.8	18.0	–	–	
CSC16/7.9/14-4S2-EN 	4+5	24.7	7.6	22.8	10.2	17.8	50	113	
Nylon case	5	24.7	7.6	22.8	10.2	17.8	–	–	

## Note

1. Minimum guaranteed impedance is |Z|<sub>typ</sub> –20%.

Flat cable shields (split)



## General data

ITEM	SPECIFICATION
Case material	polyamide (PA66), glass reinforced, flame retardant in accordance with "UL94V-0", grade A82, colour black
Clip material	spring steel (0.5 mm), zinc plated

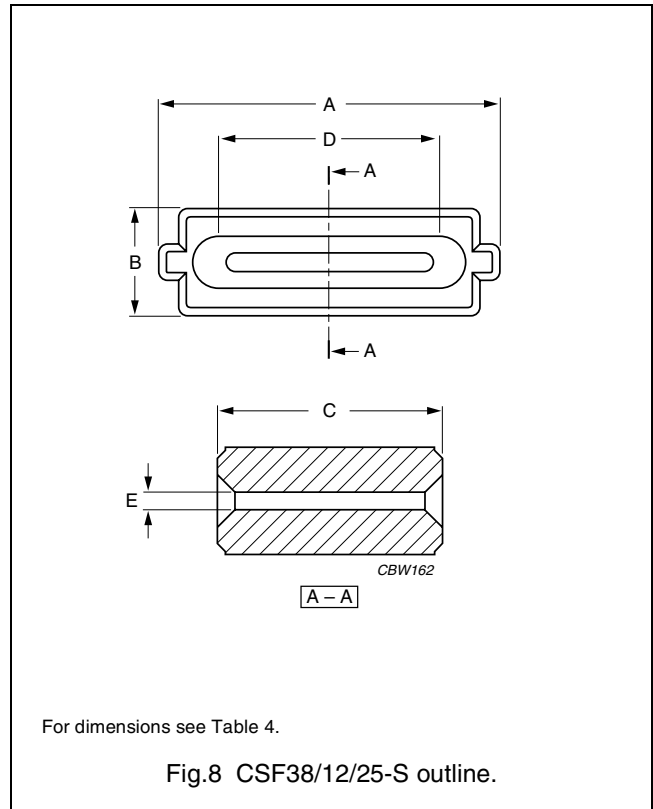
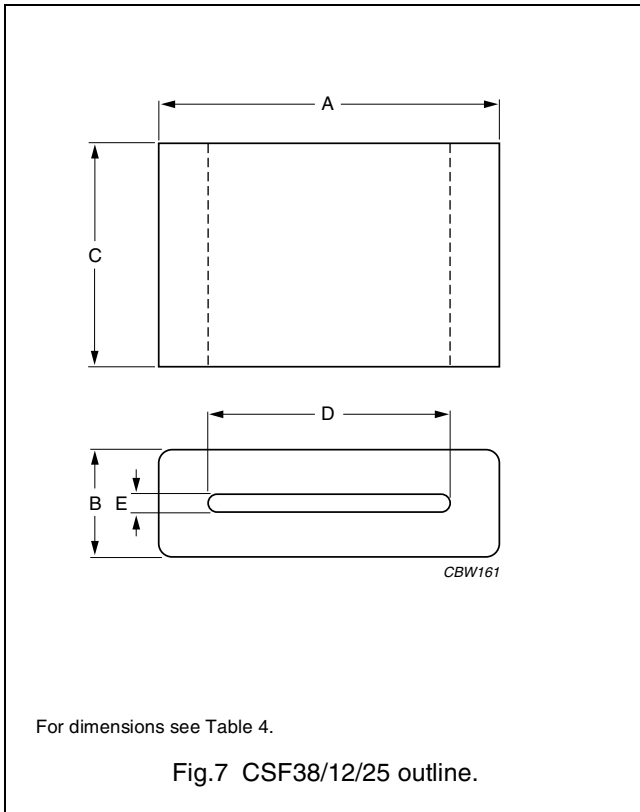
**Table 3** Type numbers, dimensions and parameters;  
see Fig.6

TYPE NUMBER	FIG.	DIMENSIONS					Z <sub>typ</sub>   <sup>(1)</sup> (Ω) at		
		A	B	C	D	E	25 MHz	100 MHz	
<b>Flat cable shields (split)</b>									
CSU45/6.4/29-4S2 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a	45.1 ±0.75	34.4 ±0.7	28.6 ±0.7	6.35 ±0.25	0.85 ±0.2	96	225	
CSU76/6.4/13-3S4 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a	76.2 ±1.5	65.3 ±1.3	12.7 ±0.4	6.35 ±0.25	0.85 ±0.2	36	110	
CSU76/6.4/15-3S4 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a	76.2 ±1.5	65.3 ±1.3	15.0 ±0.6	6.35 ±0.25	0.85 ±0.2	50	159	
CSU76/6.4/29-4S2 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a	76.2 ±1.5	65.3 ±1.3	28.6 ±0.8	6.35 ±0.25	0.85 ±0.2	75	215	
CSU76/6.4/29-3S4 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a	76.2 ±1.5	65.3 ±1.3	28.6 ±0.8	6.35 ±0.25	0.85 ±0.2	70	235	
CLI-CSU6.4 <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6c	16.1	11.0	12.7	11.4	8.0	–	–	
<b>Flat cable shields in matching nylon cases</b>									
CSU45/6.4/29-4S2-EN <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a+b	49.5	34.3	32.3	8.1	20	96	225	
Nylon case	6b	49.5	34.3	32.3	8.1	20	–	–	
CSU76/6.4/29-4S2-EN <span style="background-color: black; color: white; padding: 0 2px;">des</span>	6a+b	80.8	65.5	32.3	8.1	50.8	75	215	
Nylon case	6b	80.8	65.5	32.3	8.1	50.8	–	–	

## Note

1. Minimum guaranteed impedance is |Z|<sub>typ</sub> –20%.

Flat cable shields



**Table 4** Type numbers, dimensions and parameters; see Figs 7 and 8

TYPE NUMBER	FIG.	DIMENSIONS					Z <sub>typ</sub>   <sup>(1)</sup> (Ω) at		
		A	B	C	D	E	25 MHz	100 MHz	
<b>Flat cable shields</b>									
CSF38/12/25-3S4	7	38.1 ±1.0	12.1 ±0.35	25.4 ±0.75	26.7 ±0.75	1.9 ±0.35	110	215	
CSF38/12/25-3S4-S	8	38.5 ±0.6	12.1 ±0.4	25.4 ±0.8	26.8 ±0.8	1.9 ±0.4	98	196	

**Note**

1. Minimum guaranteed impedance is |Z|<sub>typ</sub> -20%.



## EMI-suppression products

## Cable shields




## DATA SHEET STATUS DEFINITIONS

DATA SHEET STATUS	PRODUCT STATUS	DEFINITIONS
Preliminary specification	Development	This data sheet contains preliminary data. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.
Product specification	Production	This data sheet contains final specifications. Ferroxcube reserves the right to make changes at any time without notice in order to improve design and supply the best possible product.

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## PRODUCT STATUS DEFINITIONS

STATUS	INDICATION	DEFINITION
<b>Prototype</b>		These are products that have been made as development samples for the purposes of technical evaluation only. The data for these types is provisional and is subject to change.
<b>Design-in</b>		These products are recommended for new designs.
<b>Preferred</b>		These products are recommended for use in current designs and are available via our sales channels.
<b>Support</b>		These products are <b>not</b> recommended for new designs and may not be available through all of our sales channels. Customers are advised to check for availability.