

## Excellent Integrated System Limited

Stocking Distributor

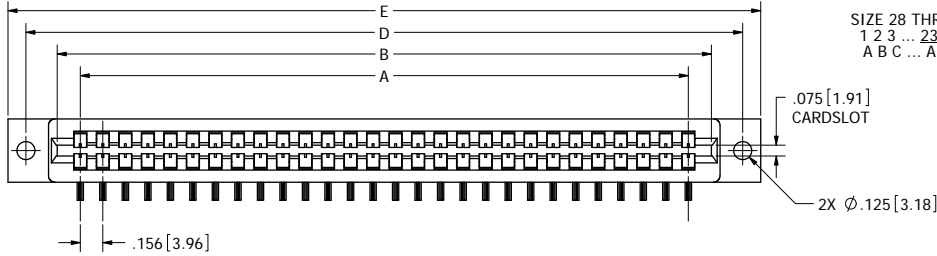
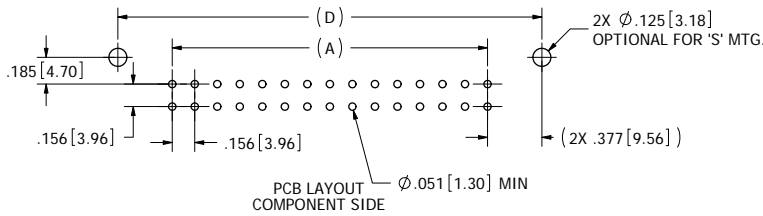
Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Sullins Connector Solutions](#)  
[EBM12DRAS](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

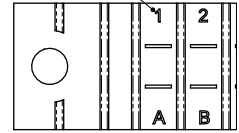
REVISIONS				
REV.	ECO. NO	DESCRIPTION	DATE	BY
A	1749	INITIAL RELEASE	7-10-08	MNH



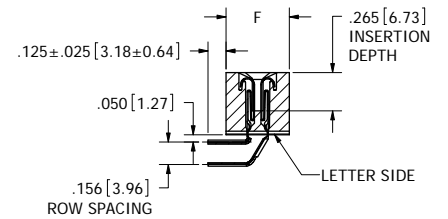
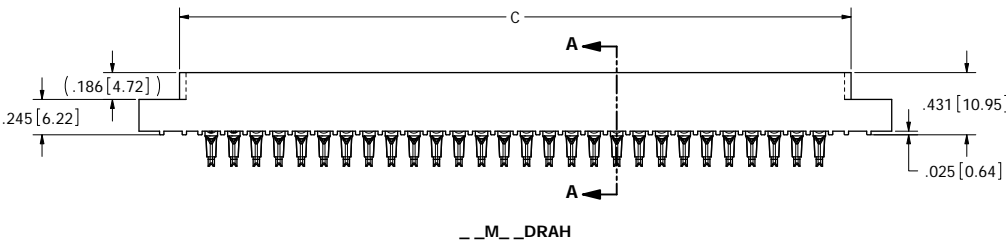
CONTACT MARKINGS  
 (LETTERS G, I, O, & Q NOT USED)

SIZE 02 THRU 25:  
 1 2 3 ... 23 24 ...  
 A B C ... AA BB ...

SIZE 28 THRU 44:  
 1 2 3 ... 23 24 ...  
 A B C ... A B ...



CONTACT ID  
 SCALE 3:1  
 (PINS OMITTED FOR CLARITY)



SECTION A-A

NOTES:

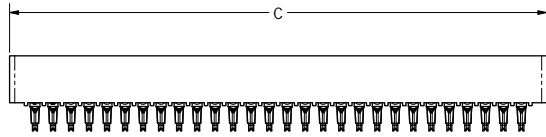
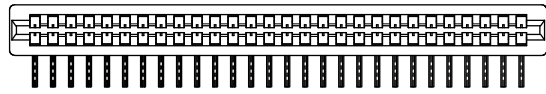
- INSULATOR MATERIAL: SEE PART NUMBER CODING.
- CONTACT MATERIAL: SEE PART NUMBER CODING.
- PLATING: SEE PART NUMBER CODING.
- TEMPERATURE: SEE PART NUMBER CODING.
- PROCESSING TEMP: SEE PART NUMBER CODING.
- UL FLAMMABILITY RATING: 94V-0.
- VOLTAGE RATING: 1800 VDC MINIMUM AT SEA LEVEL.
- CURRENT RATING: SEE PART NUMBER CODING.
- VOLTAGE DROP: 30 MILLI VOLT AT RATED CURRENT.
- INSULATION RESISTANCE: 5000 MEGA OHMS.
- CONNECTOR IDENTIFICATION: THE PART SHALL BE MARKED WITH A PART NUMBER AND BARCODE.
- BOARD THICKNESS ACCOMMODATED: .062 ± .008 [1.57 ± 0.20].
- BOARD INSERTION FORCE: 16 OZ MAX PER CONTACT PAIR WHEN USING A .062 [1.57] TEST BLADE.
- INTERNAL INSPECTION TO BE PER SULLIN'S WORK INSTRUCTION W17.3-01.
- BOARD WITHDRAWAL FORCE: 1 OUNCE MINIMUM PER CONTACT PAIR USING .062 [1.57] PCB.



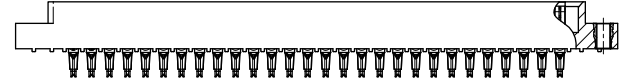
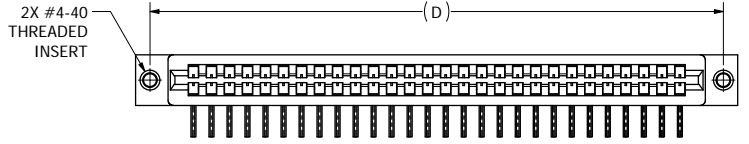
RoHS COMPLIANT

CUSTOMER COPY

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES(MM) TOLERANCES: ANGULAR: ± 30° XX±.001 [0.025] XXX±.005 [0.127] XXXX±.0005 [0.0127] SURFACE FINISH: 63 Ra REMOVE ALL BURRS AND SHARP EDGES .010 MAX INTERPRET DIMENSIONS AND GEOMETRIC TOLERANCING PER: ANSI Y14.5M-1994	DRAWN: 7-10-08 DATE: 7-10-08 NAME: MNH	
	DESCRIPTION: THE INFORMATION HEREON CONTAINS PROPRIETARY INFORMATION OF SULLINS ELECTRONICS AND IS NOT TO BE REPRODUCED, USED OR DISCLOSED TO OTHERS WITHOUT THE WRITTEN PERMISSION OF SULLINS ELECTRONICS.	
	SIZE: C DWG. NO.: C11126 SCALE: 2:1	REV: A SHEET 1 OF 3

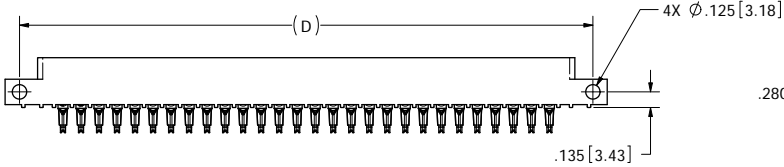
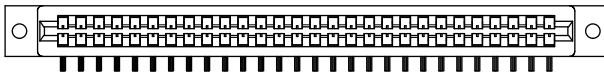


\_\_M\_\_DRAN

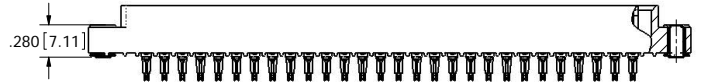
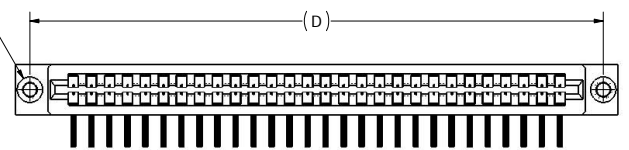


\_\_M\_\_DRAI

2X FLOATING BOBBIN  
 $\phi .116 [2.95]$  CLEARANCE  
 FOR # 4 SCREW



\_\_M\_\_DRAS



\_\_M\_\_DRAF

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UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN INCHES(MM)  
 TOLERANCES:  
 ANGULAR:  $\pm .30^\circ$   
 XX-  $\pm .001 [508]$   
 XXX-  $\pm .005 [1270]$   
 XXXX-  $\pm .0005 [1272]$   
 SURFACE FINISH: 63 Ra  
 REMOVE ALL BURRS AND SHARP EDGES .010 MAX  
 INTERPRET DIMENSIONS AND GEOMETRIC  
 TOLERANCING  
 PER: ANS Y14.5M-1994

DATE	NAME
7-10-08	MMH

THE INFORMATION HEREON CONTAINS  
 PROPRIETARY INFORMATION OF  
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 AUTHORIZED IN WRITING BY AN  
 OFFICER OF SULLINS ELECTRONICS.



DESCRIPTION: EDGE CARD .156 CC, RAB	
PART NUMBER: __M__DRA	
SIZE: C	DIWG. NO.: C11126
SCALE: 2:1	REV: A
SHEET 2 OF 3	

PART NUMBER	NO. OF POS.	A ± .008[0.20]		B ± .008[0.20]		C ± .015[0.38]		D ± .010[0.25]		E ± .020[0.51]		E ± .020[0.51]		F ± .005[0.13]			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM		
M02DRAN	2	0.156	3.96	0.476	12.09	0.596	15.14	"N" MOUNTING								0.325	8.26
M03DRAN	3	0.312	7.92	0.632	16.05	0.752	19.10										
M06DRA	6	0.780	19.81	1.100	27.94	1.220	30.99	1.533	38.94	1.782	45.26	1.882	47.80				
M08DRA	8	1.092	27.74	1.412	35.86	1.532	38.91	1.845	46.86	2.094	53.19	2.194	55.73				
M10DRA	10	1.404	35.66	1.724	43.79	1.844	46.84	2.157	54.79	2.406	61.11	2.506	63.65				
M11DRA	11	1.560	39.62	1.880	47.75	2.000	50.80	2.313	58.75	2.562	65.07	2.662	67.61				
M12DRA	12	1.716	43.59	2.036	51.71	2.156	54.76	2.469	62.71	2.718	69.04	2.818	71.58				
M15DRA	15	2.184	55.47	2.504	63.60	2.624	66.65	2.937	74.60	3.186	80.92	3.286	83.46				
M18DRA	18	2.652	67.36	2.972	75.49	3.092	78.54	3.405	86.49	3.654	92.81	3.754	95.35				
M22DRA	22	3.276	83.21	3.596	91.34	3.716	94.39	4.029	102.34	4.278	108.66	4.378	111.20				
M24DRA	24	3.588	91.14	3.908	99.26	4.028	102.31	4.341	110.26	4.590	116.59	4.690	119.13				
M25DRA	25	3.744	95.10	4.064	103.23	4.184	106.27	4.497	114.22	4.746	120.55	4.846	123.09				
M28DRA	28	4.212	106.98	4.532	115.11	4.652	118.16	4.965	126.11	5.214	132.44	5.314	134.98	0.438	11.13		
M36DRA	36	5.460	138.68	5.780	146.81	5.900	149.86	6.213	157.81	6.462	164.13	6.562	166.67	0.500	12.70		
M43DRA	43	6.552	166.42	6.872	174.55	6.992	177.60	7.305	185.55	7.554	191.87	7.654	194.41				
M44DRA	44	6.708	170.38	7.028	178.51	7.148	181.56	7.461	189.51	7.710	195.83	7.810	198.37				

Only applies for PPS/PEEK insulators with threaded inSArts or floats

**PART NUMBER CODING**

**MATERIAL (INSULATOR/CONTACT)**

- E = PBT/PHOSPHOR BRONZE**  
 OPERATING TEMP: -65°C TO +125°C @ 3 AMPS PER CONTACT  
 OPERATING TEMP: -65°C TO +21°C @ 5 AMPS PER CONTACT  
 PROCESSING TEMP: 260°C FOR 10 SECS MAX
- R = PPS/PHOSPHOR BRONZE**  
 OPERATING TEMP: -65°C TO +125°C  
 PROCESSING TEMP: 260°C FOR 120 SECS MAX  
 CURRENT RATING PER CONTACT: 5 AMPS
- G = PA9T/PHOSPHOR BRONZE**  
 OPERATING TEMP: -65°C TO +125°C  
 PROCESSING TEMP: 260°C FOR 120 SECS MAX  
 CURRENT RATING PER CONTACT: 5 AMPS
- H = PBT/BERYLLIUM COPPER**  
 OPERATING TEMP: -65°C TO +125°C @ 3 AMPS PER CONTACT  
 OPERATING TEMP: -65°C TO +105°C @ 5 AMPS PER CONTACT  
 PROCESSING TEMP: 260°C FOR 10 SECS MAX
- A = PPS/BERYLLIUM COPPER**  
 OPERATING TEMP: -65°C TO +150°C  
 PROCESSING TEMP: 260°C FOR 120 SECS MAX  
 CURRENT RATING PER CONTACT: 5 AMPS
- J = PA9T/BERYLLIUM COPPER**  
 OPERATING TEMP: -65°C TO +150°C  
 PROCESSING TEMP: 260°C FOR 120 SECS MAX  
 CURRENT RATING PER CONTACT: 5 AMPS
- F = PPS/SPINODAL (CONSULT FACTORY)**  
 AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)  
 OPERATING TEMP: -65°C TO +200°C  
 PROCESSING TEMP: 260°C FOR 120 SECS MAX  
 CURRENT RATING PER CONTACT: 3 AMPS
- C = PPS/BERYLLIUM NICKEL (CONSULT FACTORY)**  
 AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)  
 OPERATING TEMP: -65°C TO +200°C @ 3 AMPS PER CONTACT  
 PROCESSING TEMP: 260°C FOR 120 SECS MAX
- W = PEEK/BERYLLIUM NICKEL (CONSULT FACTORY)**  
 AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)  
 OPERATING TEMP: -65°C TO +250°C  
 CURRENT RATING PER CONTACT: 3 AMPS  
 (CONSULT FACTORY FOR OTHER MATERIALS)

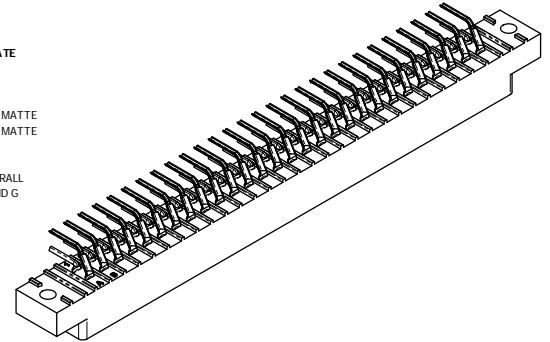
**NUMBER OF POSITIONS (CONTACTS PER ROW)**

**PLATING**

- ALL PLATINGS ARE LEAD FREE AND HAVE .000050" NICKEL UNDERPLATE
- |   |                          |
|---|--------------------------|
| CONTACT SURFACE                         | TERMINATION              |
| G = .00010" GOLD                        | .000005" GOLD            |
| Y = .000030" GOLD                       | .000005" GOLD            |
| B = .00010" GOLD                        | .000100" PURE TIN, MATTE |
| C = .000030" GOLD                       | .000100" PURE TIN, MATTE |
| **E = .000100" PURE TIN, MATTE, OVERALL |                          |
| S = .000010" GOLD OVERALL               | .000010" GOLD OVERALL    |
| M = .000030" GOLD                       |                          |
- \*\* OVERALL TIN ONLY AVAILABLE ON MATERIAL CODES E, R AND G

**MOUNTING STYLE**

- H = .125" DIA. CLEARANCE HOLES (PAGE 1)
- N = NO MOUNTING EARS (PAGE 2)
- S = .125" DIA. SIDE MOUNTING (PAGE 2)
- I = #4-40 THREADED INSERT (PAGE 2)
- F = FLOATING BOBBIN (PAGE 2)



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SHEET 3 OF 3			REV: <b>A</b> SHEET 3 OF 3