The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
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SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J858

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Electrical Terminals Blade Type

Foreword—This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

1. ***Scope***—Blade terminals listed in this SAE Recommended Practice may be used for terminating wire ends, or for terminating circuits on devices other than wire.

2. ***References***—There are no referenced publications specified herein.

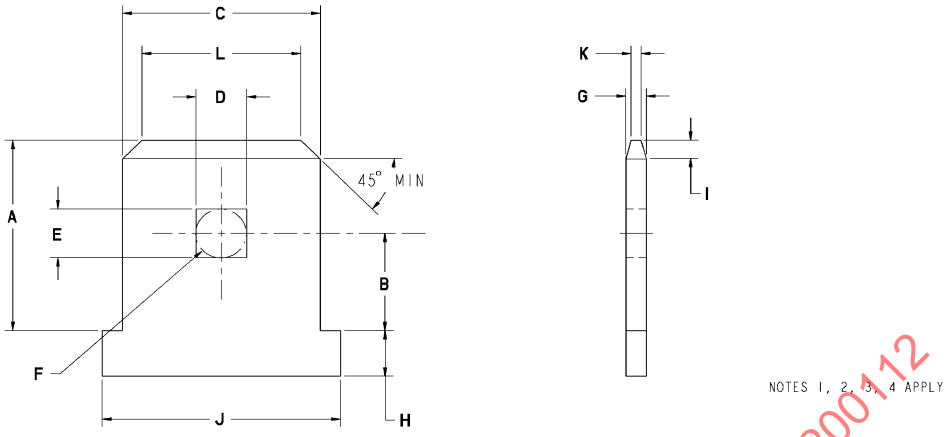
3. When blade terminals are used for terminating wire, the temper of the terminals shall be sufficiently soft to permit the terminals being assembled to the wire and not show any fracture or cracks which would impair the strength of the assembly.

   Terminals may be applied to wire by crimping, welding, swaging, soldering, or any combination at conductor grip.

   Insulation grips must be used on all terminals, or some external means of relieving strain shall be provided.

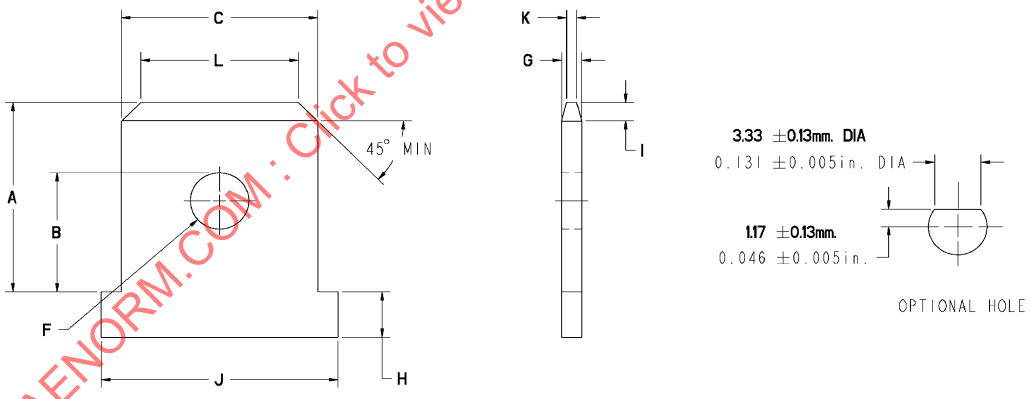
   When assembled to wire, the terminals shall fit, and securely grip, the conductor and when applicable, the insulation.

   When blade terminals are used to terminate circuits on devices, they shall be of a temper that will permit the terminating section to be formed and attached to the device without fracturing or cracking. The temper should be high enough to resist displacement of the terminal and consequently misalignment to the mating connector.



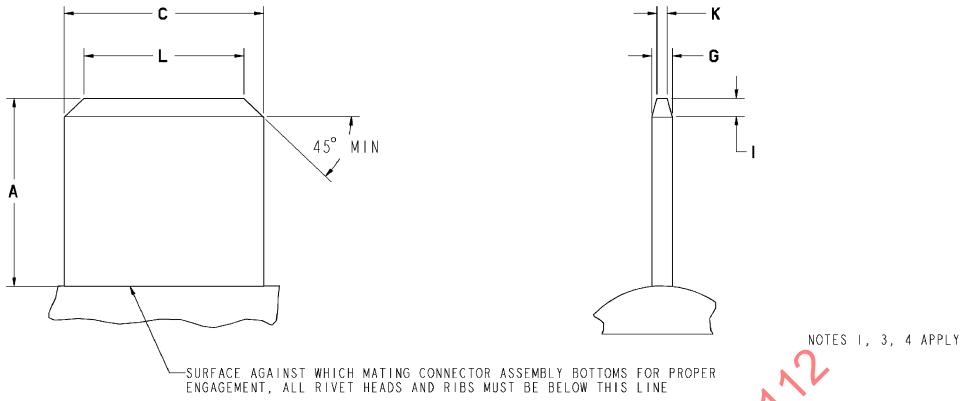
SAE No.	WIDTH (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
	7.94	7.82-8.08	4.06±0.08	7.72-8.13	2.03-2.54	1.78-2.03	1.78-2.03	0.81±0.03	1.91 min	0.76±0.25	9.37-9.73	0.33-0.48	6.10-6.60
	6.35	7.80-8.05	4.06±0.08	6.20-6.40	2.03-2.54	1.78-2.03	1.78-2.03	0.81±0.03	1.91 min	0.76±0.25	7.47-8.18	0.33-0.48	4.52-5.03
	4.76	6.22-6.60	3.56±0.08	4.65-4.88	1.40-1.91	1.14-1.40	1.14-1.40	0.81±0.03	1.91 min	0.76±0.25	6.10-6.86	0.15-0.30	2.97-3.51
	WIDTH (in)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)	J (in)	K (in)	L (in)
	5/16	0.308-0.318	0.160±0.003	0.304-0.320	0.080-0.100	0.070-0.080	0.070-0.080	0.032±0.001	0.075 min	0.030±0.010	0.369-0.383	0.013-0.019	0.240-0.260
	1/4	0.307-0.317	0.160±0.003	0.244-0.252	0.080-0.100	0.070-0.080	0.070-0.080	0.032±0.001	0.075 min	0.030±0.010	0.294-0.322	0.013-0.019	0.178-0.198
	3/16	0.245-0.260	0.140±0.003	0.183-0.192	0.055-0.075	0.045-0.055	0.045-0.055	0.020±0.001	0.075 min	0.030±0.010	0.240-0.270	0.006-0.012	0.117-0.138

FIGURE 1A—BLADE TERMINAL WITH DEPRESSION FOR USE WITH MATING SINGLE CONNECTORS



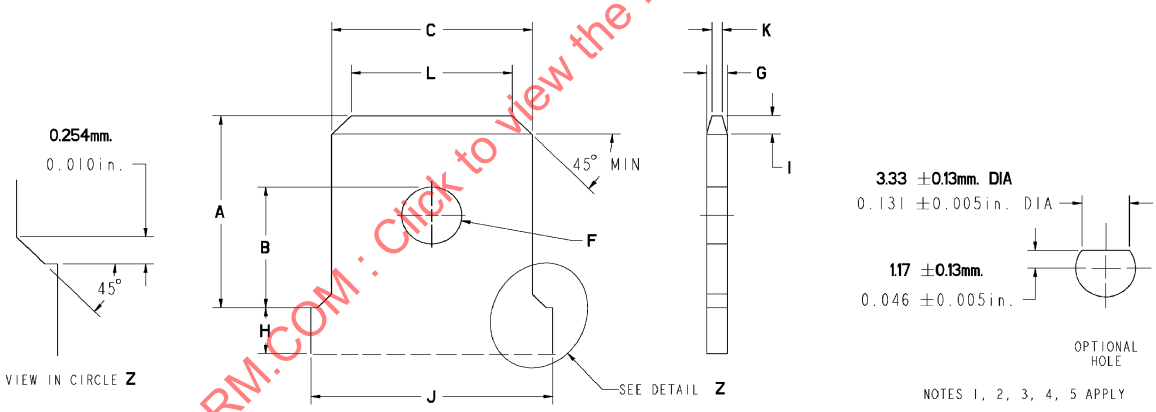
SAE No.	WIDTH (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
	7.94	7.82-8.08	4.93-5.08	7.72-8.13	-	-	2.29-2.44	0.81±0.03	1.91 min	0.76±0.25	9.37-9.73	0.33-0.48	6.10-6.60
	6.35	7.80-8.05	4.93-5.08	6.20-6.40	-	-	2.29-2.44	0.81±0.03	1.91 min	0.76±0.25	7.47-8.18	0.33-0.48	4.52-5.03
	4.76	6.22-6.60	3.81-4.06	4.65-4.88	-	-	1.40-1.65	0.81±0.03	1.91 min	0.76±0.25	6.10-6.86	0.15-0.30	2.97-3.51
	WIDTH (in)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)	J (in)	K (in)	L (in)
	5/16	0.308-0.318	0.194-0.200	0.304-0.320	-	-	0.090-0.096	0.032±0.001	0.075 min	0.030±0.010	0.369-0.383	0.013-0.019	0.240-0.260
	1/4	0.307-0.317	0.194-0.200	0.244-0.252	-	-	0.090-0.096	0.032±0.001	0.075 min	0.030±0.010	0.294-0.322	0.013-0.019	0.178-0.198
	3/16	0.245-0.260	0.150-0.160	0.183-0.192	-	-	0.055-0.065	0.020±0.001	0.075 min	0.030±0.010	0.240-0.270	0.006-0.012	0.117-0.138

FIGURE 1B—BLADE TERMINAL WITH HOLE FOR USE WITH MATING SINGLE CONNECTORS



SAE No.	WIDTH (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
	7.94	8.99-9.25	-	7.72-8.13	-	-	-	0.81±0.03	-	0.76±0.25	-	0.33-0.48	6.10-6.60
	6.35	8.97-9.22	-	6.20-6.40	-	-	-	0.81±0.03	-	0.76±0.25	-	0.33-0.48	4.52-5.03
	4.76	7.49-7.87	-	4.65-4.88	-	-	-	0.81±0.03	-	0.76±0.25	-	0.15-0.30	2.97-3.51
	WIDTH (in)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)	J (in)	K (in)	L (in)
	5/16	0.354-0.364	-	0.304-0.320	-	-	-	0.032±0.001	-	0.030±0.010	-	0.013-0.019	0.240-0.260
	1/4	0.353-0.363	-	0.244-0.252	-	-	-	0.032±0.001	-	0.030±0.010	-	0.013-0.019	0.178-0.198
	3/16	0.295-0.310	-	0.183-0.192	-	-	-	0.020±0.001	-	0.030±0.010	-	0.006-0.012	0.117-0.138

FIGURE 1C—BLADE TERMINAL WITHOUT HOLE FOR USE WITH MATING MULTIPLE CONNECTOR PLUG



SAE No.	WIDTH (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
	7.94	7.82-8.08	4.93-5.08	7.72-8.13	-	-	2.29-2.44	0.81±0.03	4.45 min	0.76±0.25	9.37-9.73	0.33-0.48	6.10-6.60
	6.35	6.76-7.52	4.93-5.08	6.20-6.40	-	-	2.29-2.44	0.81±0.03	4.45 min	0.76±0.25	7.47-8.18	0.33-0.48	4.52-5.03
	4.76	6.22-6.60	3.81-4.06	4.65-4.88	-	-	1.40-1.65	0.81±0.03	2.54 min	0.76±0.25	6.10-6.86	0.15-0.30	2.97-3.51
	WIDTH (in)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)	J (in)	K (in)	L (in)
	5/16	0.308-0.318	0.194-0.200	0.304-0.320	-	-	0.090-0.096	0.032±0.001	0.175 min	0.030±0.010	0.369-0.383	0.013-0.019	0.240-0.260
	1/4	0.266-0.296	0.194-0.200	0.244-0.252	-	-	0.090-0.096	0.032±0.001	0.175 min	0.030±0.010	0.294-0.322	0.013-0.019	0.178-0.198
	3/16	0.245-0.260	0.150-0.160	0.183-0.192	-	-	0.055-0.065	0.020±0.001	0.100 min	0.030±0.010	0.240-0.270	0.006-0.012	0.117-0.138

NOTES:

1. 45 DEG BEVEL NEED NOT BE A STRAIGHT LINE IF WITHIN THE CONFINES SHOWN.
2. H MINIMUM DIMENSION INDICATES THE AMOUNT OF SHANK NECESSARY ON TERMINAL TO CLEAR MATING PARTS. ALL PROTRUDING RIBS OR HOLD DOWN RIVETS MUST BE BELOW THIS LINE.
3. ALL PORTIONS OF TERMINAL SHOWN SHALL BE FLAT AND FREE FROM OBJECTIONABLE BURRS OR RAISED PLATEAUS. ANY HOLES OR DEPRESSION FOR DETENTS MUST BE FREE FROM RAISES OR BURRS.
4. TERMINALS CAN BE MADE FROM ANY SUITABLE MATERIAL. ANY PLATING MUST BE SMOOTH OR EVEN AND NOT HAVE A SURFACE THAT WILL INDUCE ADDITIONAL DRAG WHEN MATING PARTS ARE ENGAGED. PLATING SHALL NOT INCREASE THE TERMINAL DIMENSIONS OVER 0.0005 IN.
5. HOLE MAY BE OMITTED ACCORDING TO USE.

FIGURE 2—BLADE TERMINAL

4. Notes

4.1 Marginal Indicia—The change bar (l) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

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