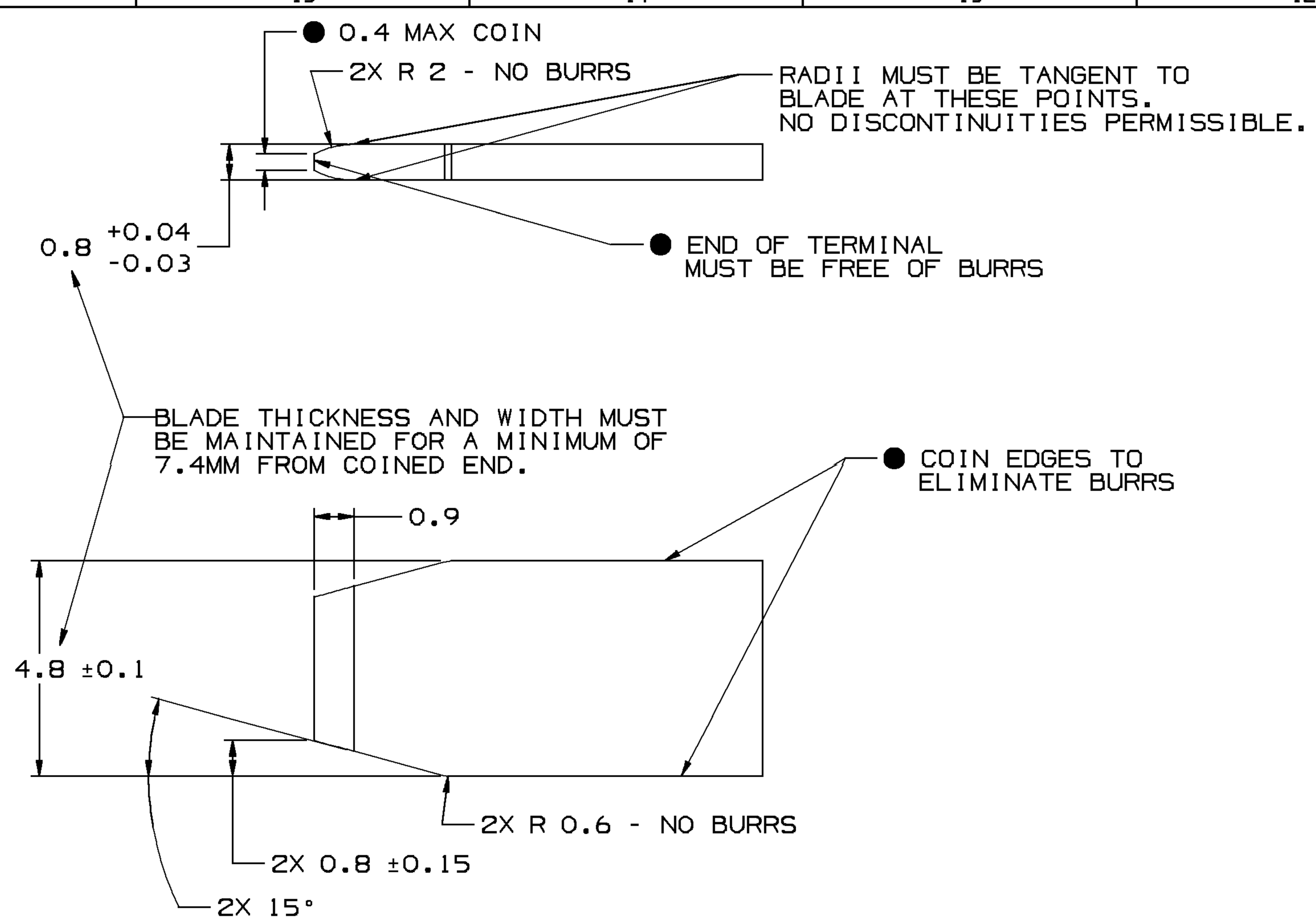


● THESE DIMENSIONS ARE CRITICAL TO THE MECHANICAL AND ELECTRICAL PERFORMANCE OF THE CONNECTION SYSTEM.

MATERIAL SPECIFICATIONS

RECOMMENDED

BASE METAL - CDA-210, EXTRA SPRING TEMPER

- TIN PLATING (WHERE APPLICABLE TO 125°C MAX CONTINUOUS USAGE): 0.0050±0.0025 MM (200±100 μIN) ELECTROPLATED TIN.
- USAGE OF PLATING TYPES OTHER THAN RECOMMENDED MUST BE APPROVED BY DELPHI PACKARD ELECTRIC SYSTEMS ENGINEERING.

MINIMUMS

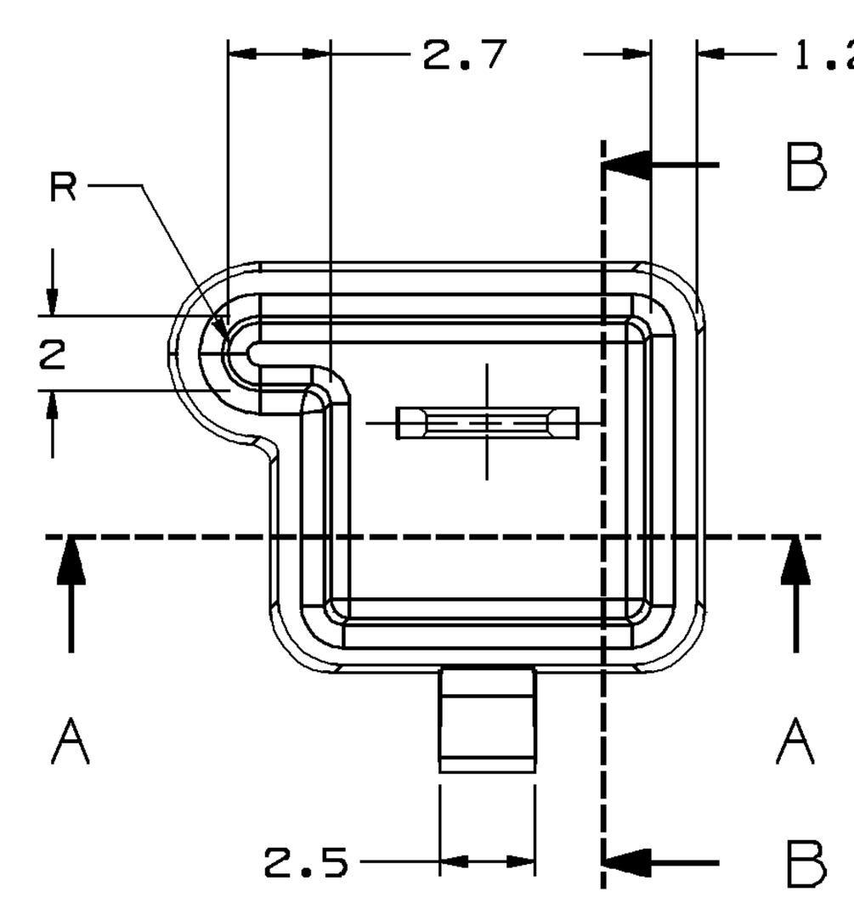
ELECTRICAL CONDUCTIVITY - ≥28% IACS AT 20 °C. USE OF A MATERIAL WITH CONDUCTIVITY <28% IACS MUST BE APPROVED BY PACKARD ELECTRIC MATERIALS ENGINEERING.

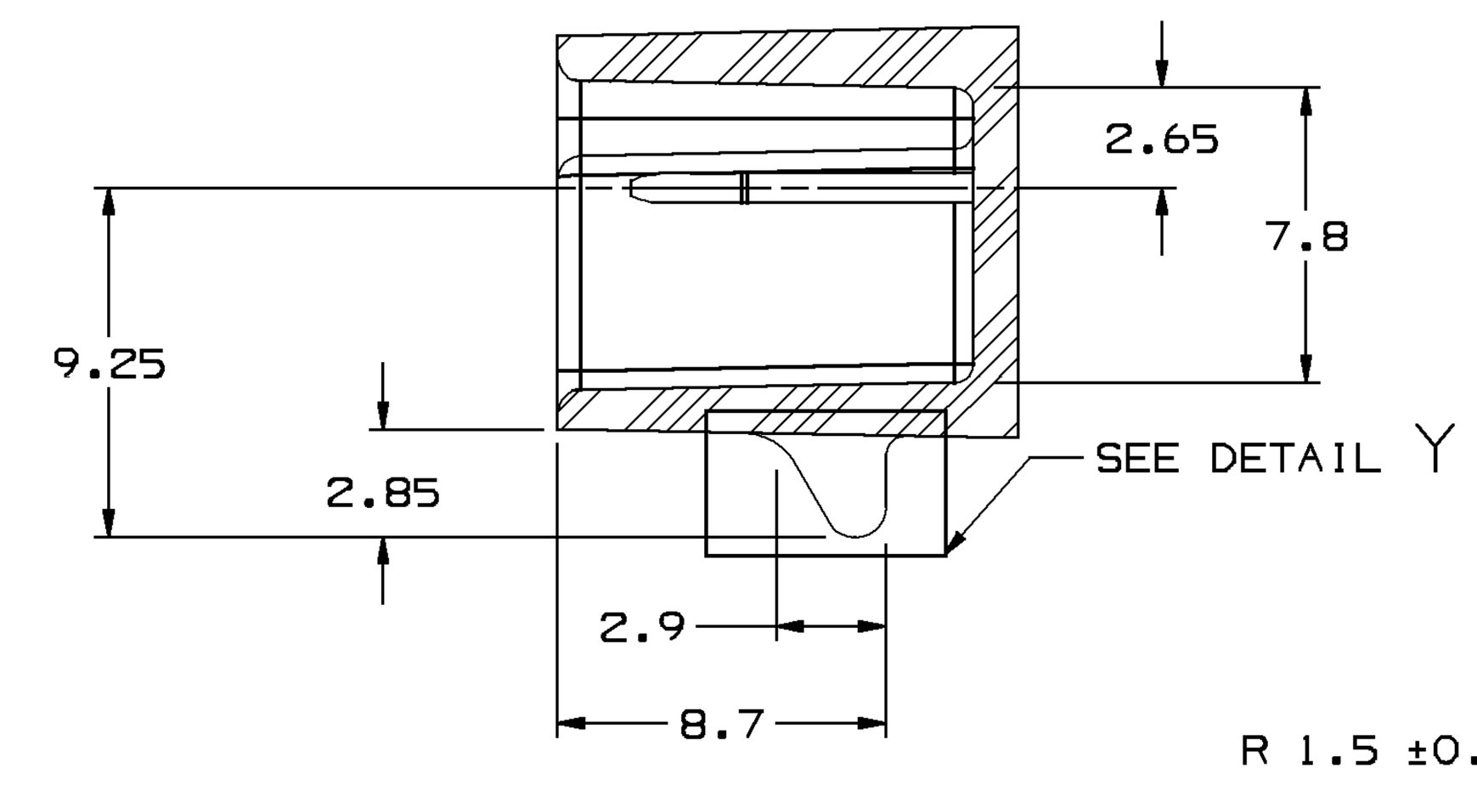
TENSILE STRENGTH - 430 - 480 MPa

UNDERPLATING FOR TIN PLATING - FOR BASE MATERIALS CONTAINING 10% OR MORE ZINC, AN UNDERPLATE OF COPPER 0.0025 MM (100 μIN) MINIMUM THICK IS REQUIRED.

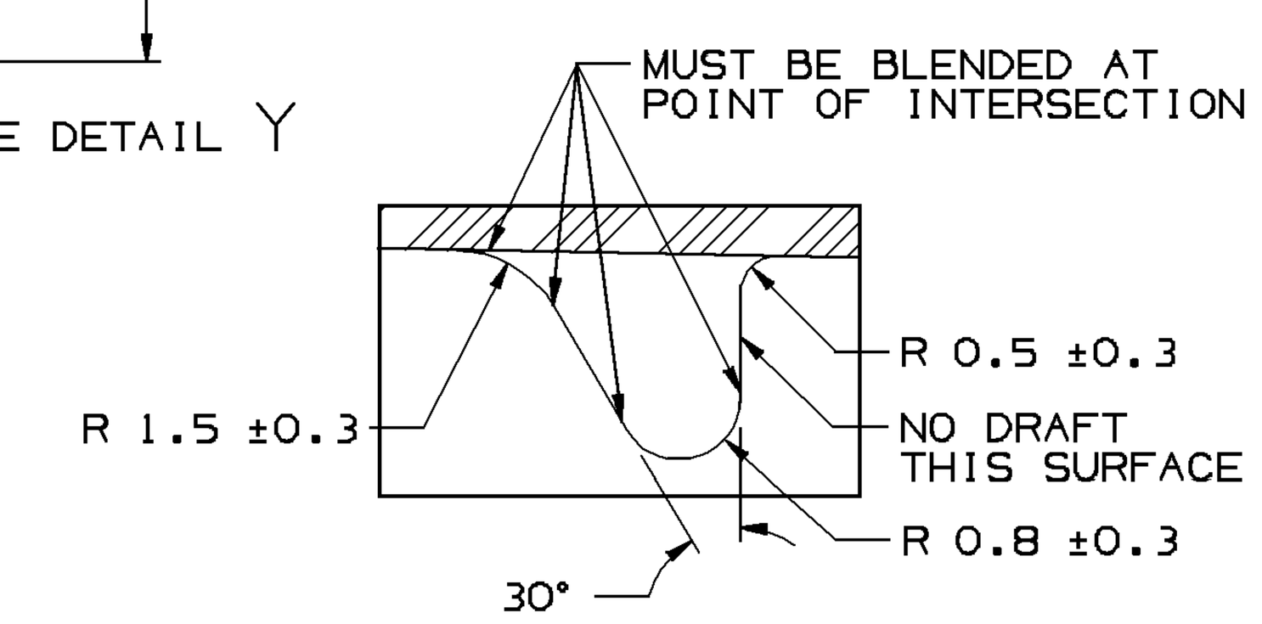
PROCESSING LUBRICANT - ANY PROCESSING LUBRICANT REMAINING ON TERMINALS MUST NOT VARNISH OR DEGRADE THE ELECTRICAL PERFORMANCE OF THE CONNECTION UP TO A MAXIMUM TEMPERATURE OF 150°C. PROCESSING LUBRICANTS MUST BE APPROVED BY DELPHI PACKARD ELECTRIC SYSTEMS ENGINEERING.

MATING BLADE INFORMATION

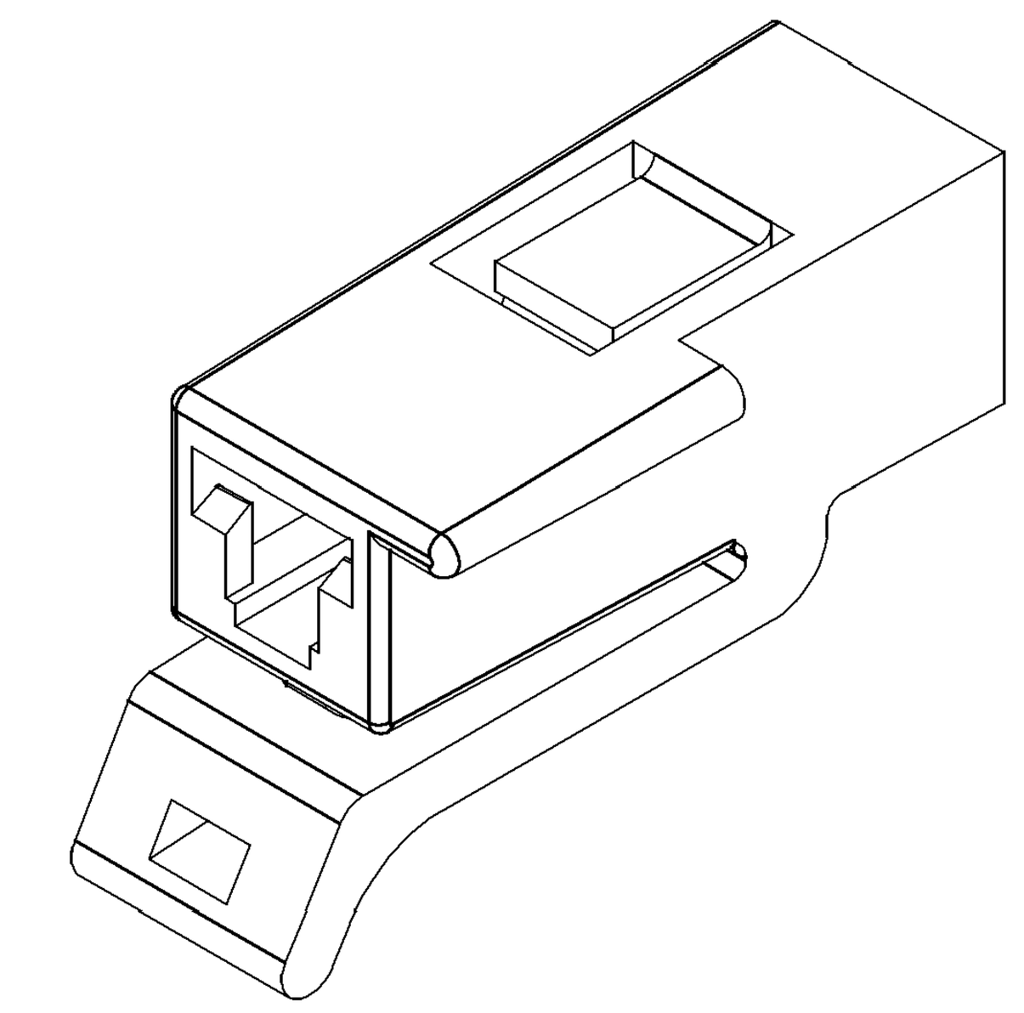


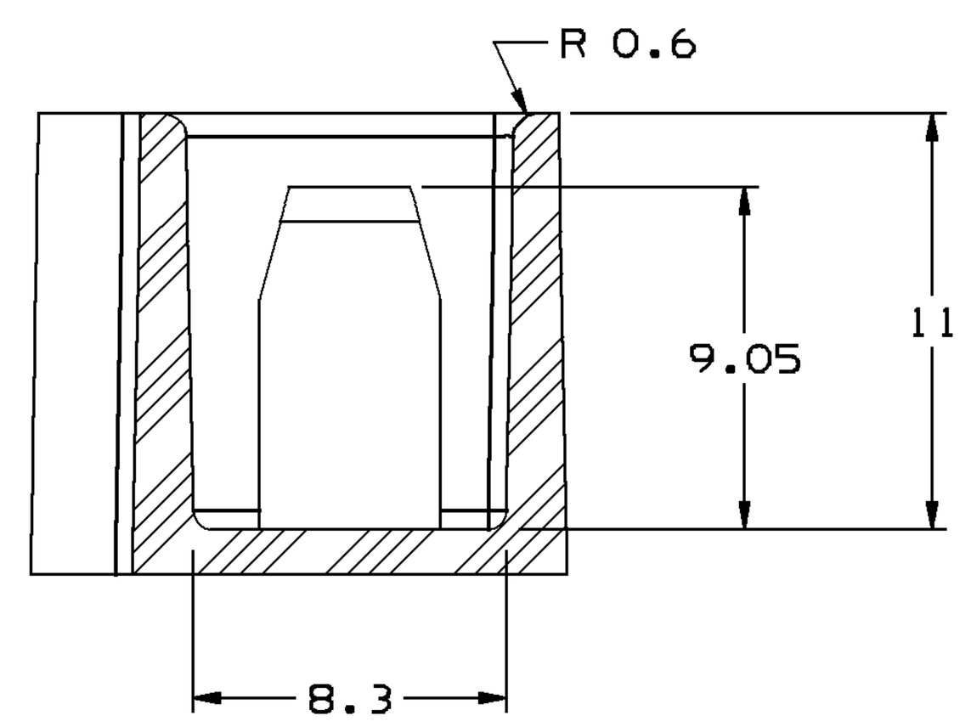


SECTION B-B



DETAIL Y
SCALE 10:1





SECTION A-A

MATING CONNECTOR INFORMATION

RECOMMENDED MATERIAL - UNMODIFIED POLYESTER

NOTES

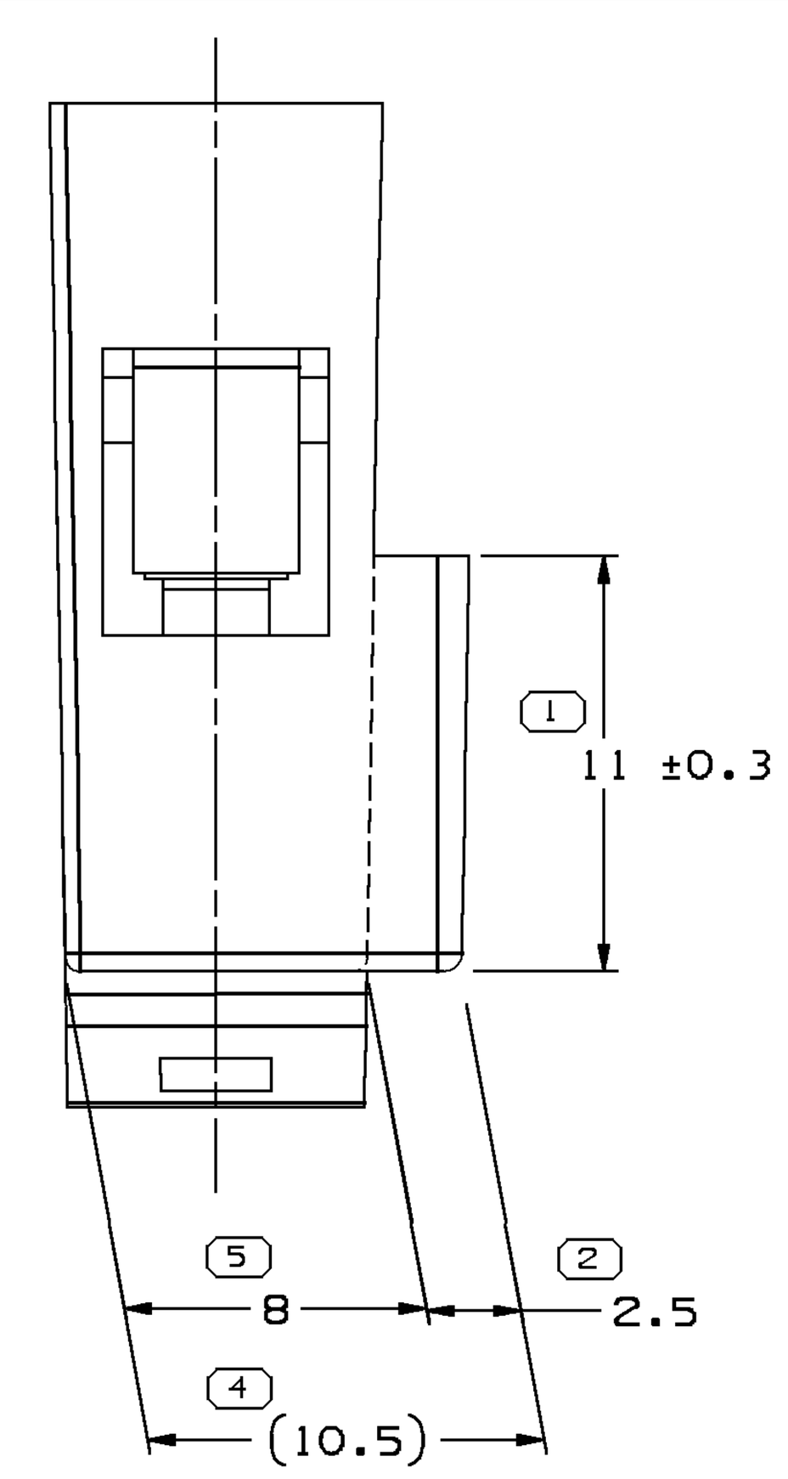
1. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED:

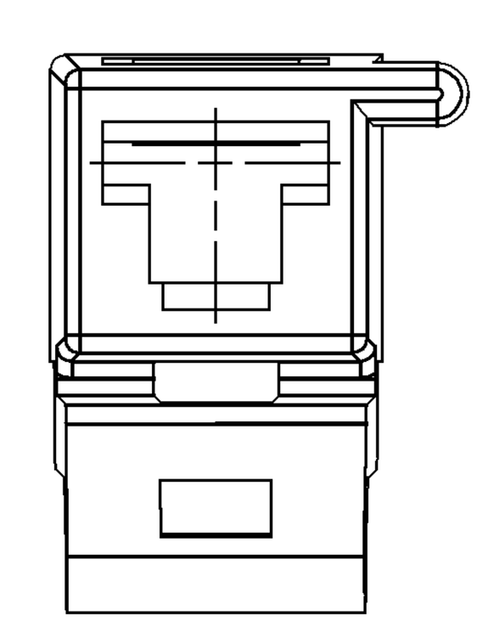
DIMENSIONS ARE TO FACE OF VIEW SHOWN AND AUTOMATICALLY ROUNDED BY COMPUTER FOR INSPECTION (SEE MATH MODEL FOR PRECISE DIMENSIONS). FOR ALL OTHER DIMENSIONS NOT SHOWN BUT REQUIRED FOR TOOL BUILD, SEE MATH MODEL FOR PRECISE TOOL PATH DATA. ALL RADII 0.5
DRAFT IS 1° MAX ON ALL OUTSIDE SURFACES.

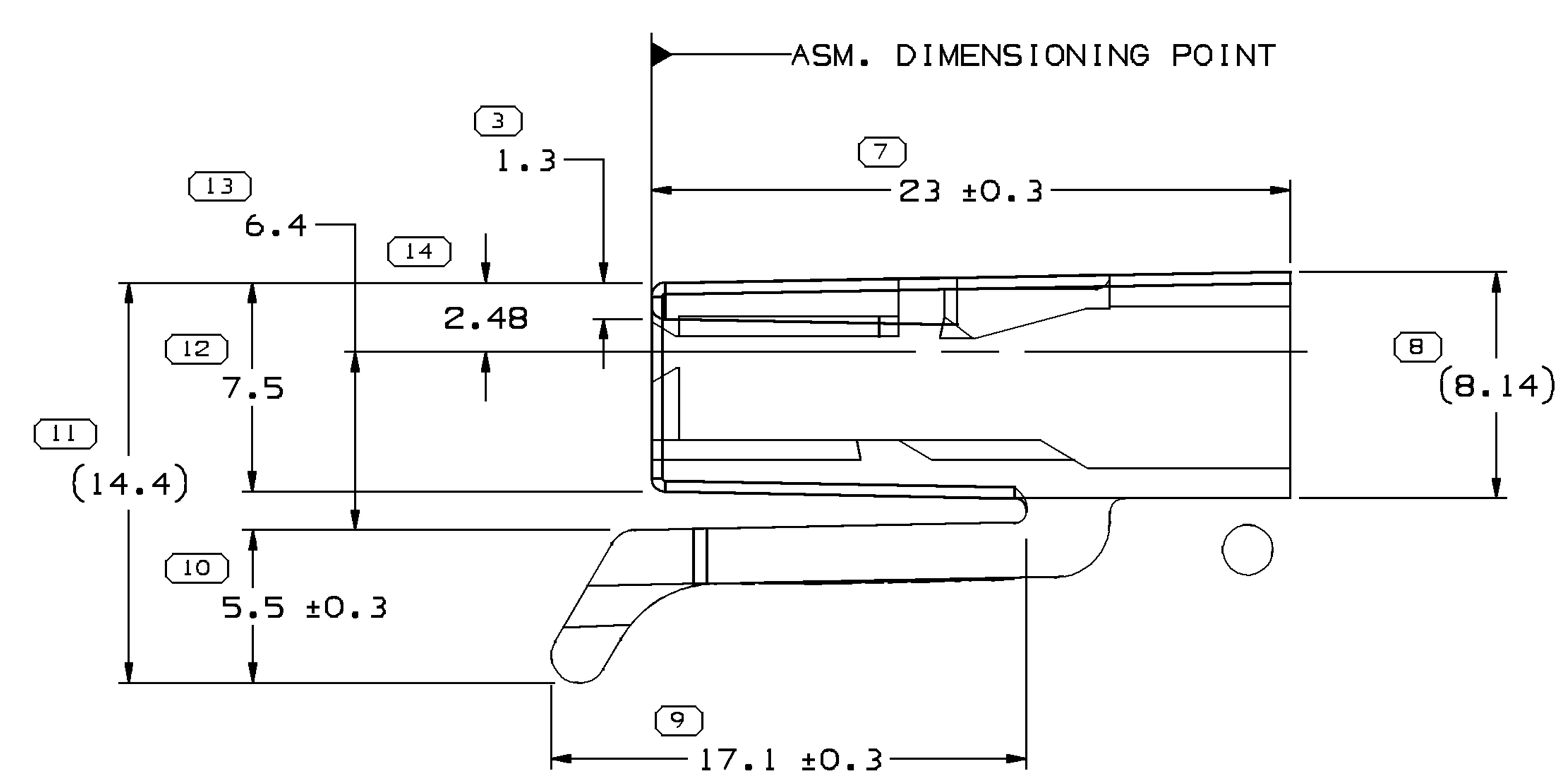
SYMBOL DEFINITION		
A DIMENSION WITHOUT AN INSPECTION REPORT SYMBOL ⬭ DOES NOT REQUIRE INSPECTION. IT MAY BE CONTROLLED ON THE INDIVIDUAL COMPONENT DRAWING.	TOTAL NO OF INSPECTIONS REQUIRED	14
	LAST NO. USED	14

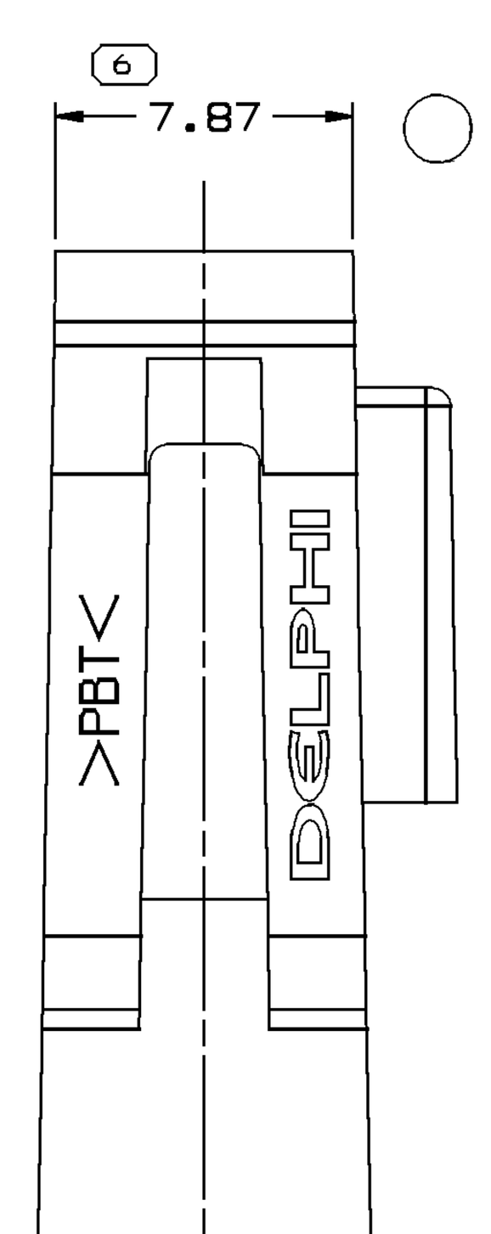
MISSING SYMBOLS
NO MISSING SYMBOL NUMBER

DWG STATUS DATE	STG	REV	N/P	CHG	ZONE	REVISION HISTORY	AUTH	DR	APVD 1	APVD 2
27FE06	R	B3	-	-		CLEARED REV COL & CREATED PART DRAWING	277643	ACG	FKV	BDG
18MY06	R	B4	-	-		REMOVED DRAFT ON TOP SURFACE BEHIND LOCK AND REMOVED BLENDS TO MAKE MODEL MATCH PART	280075	RH	RH	BDG









NOTES

1. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED:

   DIMENSIONS ARE TO FACE OF VIEW SHOWN AND AUTOMATICALLY ROUNDED BY COMPUTER FOR INSPECTION (SEE MATH MODEL FOR PRECISE DIMENSIONS). FOR ALL OTHER DIMENSIONS NOT SHOWN BUT REQUIRED FOR TOOL BUILD, SEE MATH MODEL FOR PRECISE TOOL PATH DATA.

2. MATERIAL RECYCLING CODE PER ISO 11469. (2.3)X(0.1) CHARACTERS AS SHOWN TO BE LOCATED ON ANY EXTERIOR SURFACE. OPTIONAL CONSTRUCTION TO BE NO MATERIAL RECYCLING CODE.
3. THIS PART IS NOT CONTROLLED FOR AUTOMATIC FEEDING.
4. REFERENCE MATING COMPONENTS OR EQUIVALENT:

   CONNECTOR 12059885

5. (2.3)X(0.1) DELPHI CORPORATE BRAND TO BE LOCATED ON ANY EXTERIOR SURFACE, PREFERABLY VISIBLE AT FINAL ASSEMBLY. OPTIONAL CONSTRUCTION TO BE PED OR NO LOGO.

DIMENSIONAL RANGE (MM)									CHART E1
FROM / TO	> 0 / 20	> 20 / 30	> 30 / 70	> 70 / 100	>100 / 150	>150 / 200	>200 / 250	>250 / 300	>300 / 400
TOLERANCE UNLESS OTHERWISE SPECIFIED	±0.15	±0.2	±0.3	±0.4	±0.5	±0.6	±0.8	±1	±1.2

ANGULAR TOLERANCE ±2°

(7) PROCESS SENSITIVE DIMENSION

DIMENSIONS ENCLOSED IN ( ) INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE LIMITS ARE ESTABLISHED

DWG TYPE: PART DRAWING
STYLE:
VOLUME (CM³): 1.106
DISTR CODE: D

UNLESS OTHERWISE SPECIFIED
THIS DOCUMENT IS IN ACCORDANCE WITH ASME Y14.5M-1994 AS AMENDED BY THE GM GLOBAL DIMENSIONING AND TOLERANCING ADDENDUM-2001. SEPARATE PATTERNS OF FEATURES MAY BE GAGED SEPARATELY REGARDLESS OF DATUM REFERENCES.

ALL DIMENSIONS ARE IN MILLIMETERS

REFERENCE

THIRD ANGLE PROJECTION

DO NOT SCALE

USE MATH DATA

CAD UNIGRAPHICS

DELPHI

DELPHI PACKARD ELECTRIC SYSTEMS
WARREN, OH

		DATE
DR		
APVD1	D. THOMAS	22AP87
APVD2	J. COLDSNOW	27AP87
APVD3	J. P. LITTLEFIELD	15JN87
APVD4		
APVD5		

SUBSTANCES OF CONCERN AND RECYCLED CONTENT PER DELPHI 10949001

MATERIAL: M4695002 PBT BLK

DRAWING NAME: CONN 1 F M/P 480 BLK

DRAWING NUMBER: 12059884

SIZE	SCALE	FRAME NO	SHEET NO	STG	REV	N/P
A0	5:1	1 OF 1	1 OF 1	R	B4	-

User: DZ8NWL Part: 12059884-CUS01-S01 Date: 22-May-06 Time: 06:33 Message: