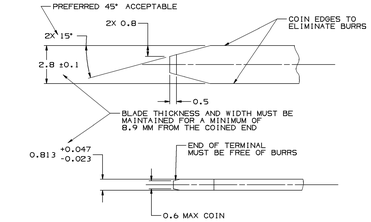


MATERIAL SPECIFICATIONS

RECOMMENDED
BASE METAL - CDA-210, GILDING, EXTRA SPRING TEMPER
PLATING - 0.0050 ± 0.0025 MM THK TIN

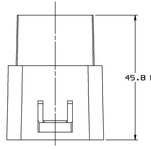
MINIMUMS
ELECTRICAL CONDUCTIVITY - ≥ 20% IACS AT 20°C. USE OF A MATERIAL WITH CONDUCTIVITY < 20% IACS MUST BE APPROVED BY DELPHI PACKARD ELECTRIC MATERIALS ENGINEERING.

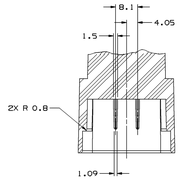
TENSILE STRENGTH - 407 MPa
PLATING - FOR LOW ENERGY (≤ 5V) AND NON-PASSENGER COMPARTMENT POWER CIRCUITS, 0.0050 ±0.0025 MM THICK TIN. FOR MATERIALS CONTAINING 10% OR MORE ZINC, AN UNDERPLATE OF COPPER 0.0050 ±0.0025 MM THICK IS REQUIRED.

BLADE THICKNESS
UNPLATED : 0.813 ± 0.025
TIN PLATED : 0.823 ± 0.030

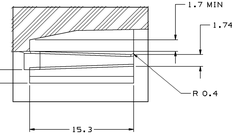
MATING BLADE INFORMATION

SCALE 10:1

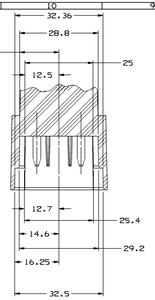




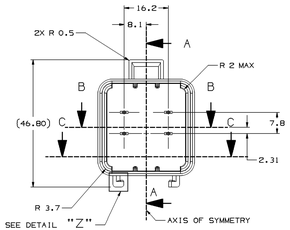
SECTION C-C

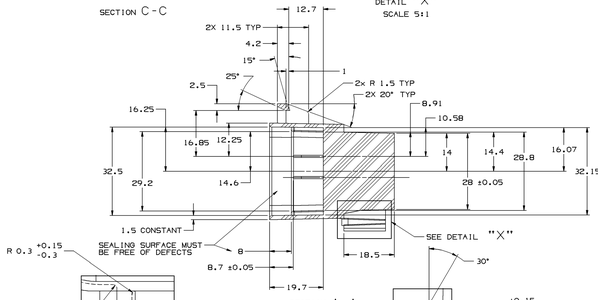


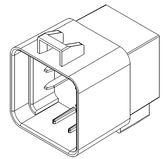
DETAIL "X"
SCALE 5:1

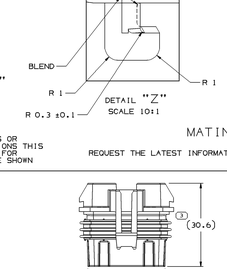


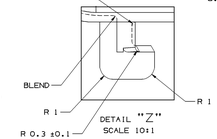
SECTION B-B











DETAIL "Z"
SCALE 10:1

DETAIL "Y" (CRUSH POINT)
SCALE 10:1

MATING DEVICE REQUIREMENTS

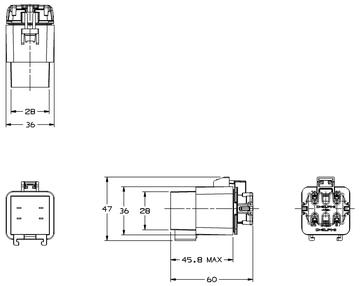
(RELAY APPLICATIONS)
REQUEST THE LATEST INFORMATION FOR THE MATING DEVICES FROM DELPHI PACKARD ELECTRIC
SEE NOTE 1

NOTES:

1. ALL RADII 0.4 UNLESS OTHERWISE SPECIFIED
2. DIMENSIONS ARE TO FACE OF VIEW SHOWN UNLESS OTHERWISE INDICATED
3. 1° DRAFT ON ALL OUTSIDE SURFACES UNLESS OTHERWISE SPECIFIED
4. RECOMMENDED MATERIAL - GLASS FILLED NYLON OR POLYESTER.
5. WHEN USING THIS INFORMATION FOR A NEW DESIGN, REQUEST THE LATEST COPY OF THIS PRINT FROM DELPHI PACKARD ELECTRIC

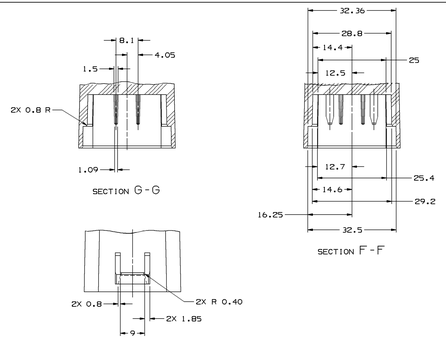
SYMBOL DEFINITION			MISSING SYMBOLS
A DIMENSION WITHOUT AN INSPECTION REPORT SYMBOL ☐ DOES NOT REQUIRE INSPECTION. IT MAY BE CONTROLLED ON THE INDIVIDUAL COMPONENT DRAWING.	TOTAL NO OF INSPECTIONS REQUIRED	5	1-2 5-8 10 13-14
	LAST NO. USED	14	

DWG STATUS DATE	STS	REV	N/P	CHG	ZONE	REVISION HISTORY	AUTH	DR	APVD	APVD 2
02JN04	R	03	-	-		UPDATED FORMAT. UPDATED BASE CONNECTORS. UPDATED NOTES. ADDED/DELETED MATING INFORMATION TO REFERENCE.	254871	LL	LL	TM
24JA05	R	04	-	-		OBSOLETED PART 12162331; PART 12129716 ADDED NOTE (2) CONNECTOR SEAL, MKS. 12065663; REMOVED SECTION VIEW D-D; REVISED DIMS 3 AND 4 TO REFERENCE; REMOVED DIMS 1,2,5,6,7,8,10,13 AND 14	263412	RH	RH	MR
15MR07	R	05	-	-		UPDATED PDM ATTRIBUTES	460792	MM	MM	TM



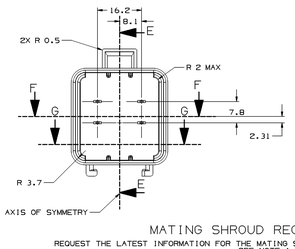
280 SEALED RELAY ASSEMBLED DIMENSIONS

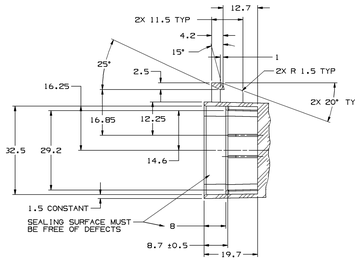
ALL DIMENSIONS ARE REFERENCE, EXCEPT AS NOTED
SCALE 1:1



SECTION G-G

SECTION F-F

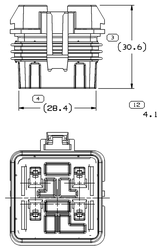


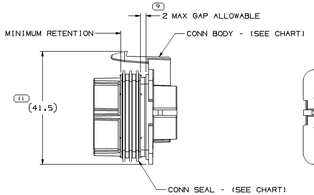


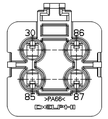
SECTION E-E

MATING SHROUD REQUIREMENTS

REQUEST THE LATEST INFORMATION FOR THE MATING SHROUD FROM DELPHI PACKARD ELECTRIC
SEE NOTE 1

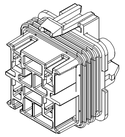






NOTES:

1. MATING COMPONENT DIMENSIONS SHOWN ARE REFERENCE ONLY. WHEN USING THIS INFORMATION FOR A NEW DESIGN, REQUEST THE LATEST MATING INFORMATION FROM DELPHI PACKARD ELECTRIC. REVIEW LATEST MATING SHROUD & DEVICE COMPONENT PRINTS FOR ACTUAL DIMENSIONS.
2. CAVITIES TO ACCEPT 12129411 TERMINAL OR EQUIVALENT. MAXIMUM CABLE DIAMETER 3.65 MM
3. WHEN PARTS ARE SHIPPED, THEY MUST BE PACKED IN EITHER PLASTIC BAGS OR SHIPPING CONTAINERS LINED WITH PLASTIC LINERS. BAGS OR LINERS MUST BE SEALED TO AVOID ENTRY OF FOREIGN MATTER
4. CONNECTOR ACCEPTS CPA 12052834 OR EQUIVALENT
5. FOR LEAD LENGTH CALCULATIONS, DISTANCE FROM MATING END OF CONNECTOR TO FRONT OF CABLE CORE IS 15.05/11.65
6. SEALING CODE 2 - DESIGN WILL PASS SALT FOG TEST AFTER CONDITIONING AS SPECIFIED IN ESA-644 (WEATHER-PACK), ESA-710 (METRIC-PACK), ESA-650 (UNDERHOOD MICRO-PACK), C-4006 (WORLD CONNECTOR), ETC WHEN MATED TO MATING PART OR EQUIVALENT.
7. CONNECTOR TO ACCEPT 12110540 TPA OR EQUIVALENT
8. CAVITIES TO ACCEPT CABLE SEAL 12015323 OR EQUIVALENT
9. 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 DIMENSION)
10. NO PROCESSING OIL ALLOWED TO BE ADDED TO AID IN THE APPLICATION OF THE SEAL TO THE CONNECTOR



PART NO	REV	N/P	STATUS	CONNECTOR BODY	CONNECTOR SEAL
12162331	A2	-	OBSOLETE	12162330	12065663
12129716	02	AA	-	12110787	15409460

DRAWING NUMBER	SIZE	SCALE	PAGE NO	SHEET NO	TYPE	REV	N/P
12162459	A1x3	2:1	2 OF 2	1 OF 1	R	05	-

DWG TYPE	PART DRAWING
STYLE	
VOLUME (CM³)	SYSTEM CODE D

UNLESS OTHERWISE SPECIFIED
THIS DOCUMENT IS IN ACCORDANCE WITH ASME Y14.5M-1994 AS INTERPRETED BY THE GLOBAL DIMENSIONING AND TOLERANCING STANDARD. ALL DIMENSIONS ARE TO BE PRESENT ON THE DRAWING. FEATURES MAY NOT BE SHOWN SEPARATELY FOR CLARITY OF SYSTEM REFERENCES.

ALL DIMENSIONS ARE IN MILLIMETERS

REFERENCE

9 PROCESS SENSITIVE DIMENSION

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

ALL DECIMALS	ANGLE	DIMENSIONS											
±0.13	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25

TOLERANCE UNLESS OTHERWISE SPECIFIED
[±0.13] [±0.4] [±0.1] [±0.2] [±0.8] [±0.5] [±1.0] [±1.2]
DEVELOP TOLERANCE [%]

THIRD ANGLE PROJECTION

DO NOT SCALE
SEE MATH DATA

DELPHI
DELPHI PACKARD ELECTRICAL/ELECTRONIC ARCHITECTURE
WARREN, OH

		DATE
DR	HENRY HOKE	30JN94
APVD1	HENRY HOKE	30JN94
APVD2	TOM MAUDEN	04JN04
APVD3		
APVD4		
APVD5		

SUBSTANCES OF CONCERN: NO RECYCLED CONTENT PER DELPHI (29490)

DRAWING NAME
SEE DRAWING

DRAWING NAME
TAXI ASM CONN F M/P 280 SLD FLXLK

DRAWING NUMBER
12162459

SIZE	SCALE	PAGE NO	SHEET NO	TYPE	REV	N/P
A1x3	2:1	1 OF 2	1 OF 1	R	05	-

12162459