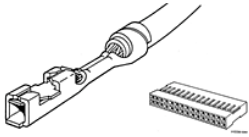


**48257-000LF - Mini-PV™, Basics+ : 2.54 mm (0.1 in.) Centerline Crimp-to-Wire Receptacle**



[www.fci.com](http://www.fci.com)

## Specifications

### General

<b>Product Type</b>	Crimp-to-Wire Contact
<b>Number of contacts (per housing)</b>	2-20
<b>Mating half</b>	Mates with most 2.54 mm (0.1 in.) Centerline Products with 0.64 mm (0.025in.) Square or Round Pins
<b>Series Number</b>	48257

### Dimensional

<b>Size (Wire)</b>	22 to 26 AWG
<b>Height (Crimp)</b>	0.81 - 0.86 mm (0.032 - 0.034 in.)
<b>Size Insulation OD (Discrete contact)</b>	0.91 mm (0.036 in.) to 2.62 mm (0.103 in.)
<b>Size Insulation OD (Latch housing application)</b>	0.91 mm (0.036 in.) to 1.52 mm (0.06 in.)
<b>Thickness (Spring)</b>	0.165 mm (0.0065 in.)

### Electrical

<b>Current rating</b>	3A Continuous
<b>Resistance (Contact)</b>	15 M-ohms max.
<b>Resistance (Insulation)</b>	5000 M-ohms
<b>Voltage rating</b>	1000V rms

### Mechanical

<b>Insertion force</b>	10.79N (1100 gf)
<b>Withdrawal Force</b>	1.75N (175 gf)
<b>Spring force</b>	Ultra - High

### Physical

<b>Material (Contact)</b>	Copper Alloy
<b>Plating (Contact area)</b>	0.38 µm (15 µin.) Gold
<b>Humidity Range</b>	10% to 95%
<b>Underplating</b>	1.27 µm (50 µin.) Nickel
<b>Material (Spring)</b>	Copper Alloy
<b>Temperature (Operating - range)</b>	-65°C to +125°C

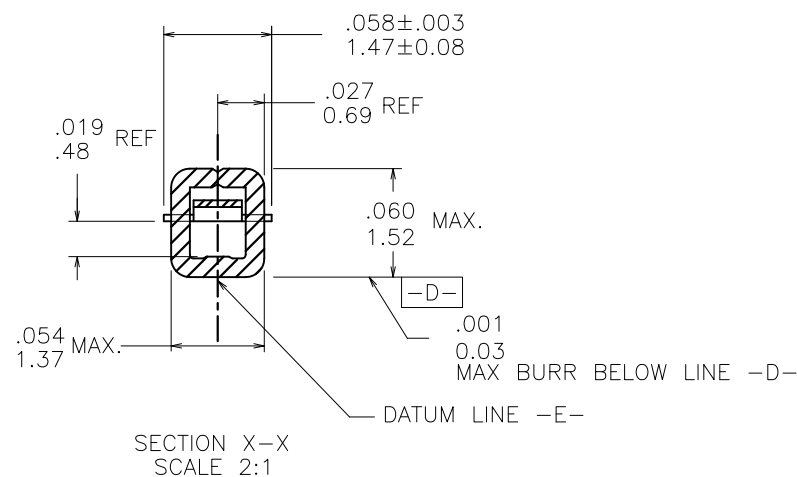
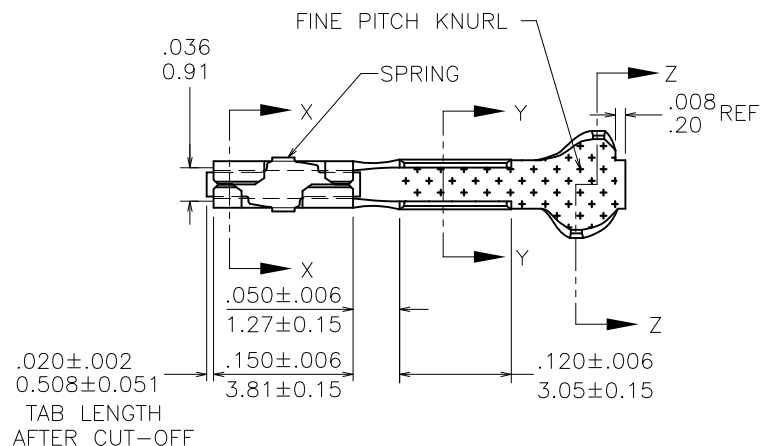
### Approvals / Certifications

<b>UL File Number</b>	E66906
<b>CSA File Number</b>	LR46923
<b>Approvals / Certifications</b>	UL and CSA Approved

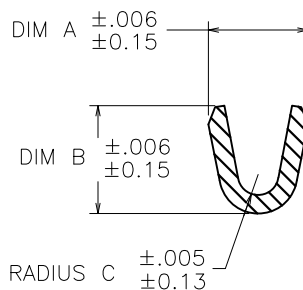
**Other Features**

<b>Accessory</b>	Ratcheting Hand Crimping Tool: Part Number HT-0095
<b>Packaging (Type)</b>	Box
<b>Comments</b>	PV™ Contact Removal Tool: Part Number HT-0080

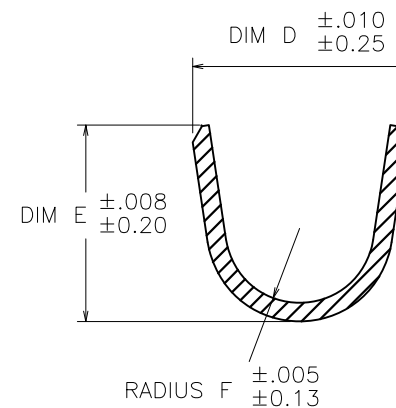
PRODUCT NUMBER  
SEE SHEET 3



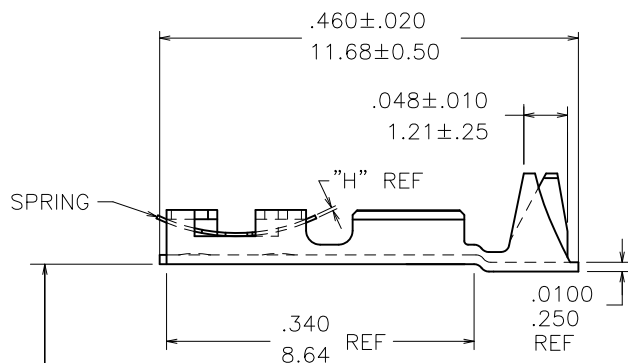
SECTION X-X  
SCALE 2:1



SECTION Y-Y  
WIRE BARREL  
SCALE 2:1



SECTION Z-Z  
INSULATION BARREL  
SCALE 2:1



NOTE 2

mat'l. code				surface	tolerance	projection	product family
SEE TABLE				✓		⊕	PV TERMINALS
ltr	ecn no	dr	date	tolerances unless otherwise specified		INCH/MM scale 5:1	title
AG	v07-0218	HTB	2007-03-16	angles	.XX±.01/.X±.3		MINI PV™ RECEPTACLE CRIMP TO WIRE
AH	v08-0113	HTB	2008-03-28	linear	.XXX±.005/.XX±.13		
AJ	F08-0159	HTB	2008-04-16		.XXXX±.0020/.XXX±.051		
AK	F08-0189	HTB	2008-06-25	dr	T. BREWBAKER	2006-04-18	dwg no
AL	v08-0510	HTB	2008-12-02	engr	T. BREWBAKER	2006-04-18	sheet 1 of 6
AM	V10-0359	HTB	2010-09-15	chr	T. BREWBAKER	2006-04-18	size
AN	V12-0006	HTB	2012-01-05	appd	T. BREWBAKER	2006-04-18	A3
sheet	revision	AN	AN	AN	AN	AN	type
index	sheet	1	2	3	4	5	Product Customer Drawing

PRODUCT NUMBER	AWG	WIRE BARREL			INSULATION BARREL				RECOMMENDED HANDTOOL FOR LOOSE PIECE APPLICATION
SEE SHEET 3	RANGE	DIM A	DIM B	RADIUS C	INSULATION DIAMETER RANGE	DIM D	DIM E	RADIUS F	
	18-20	.104/2.64	.104/2.64	.021/.53	.042/1.07-.103/2.62	.139/3.53	.120/3.05	.050/1.27	HT-0073
	22-26	.070/1.78	.070/1.78	.017/.43	.036/.91-.103/2.62	.139/3.53	.120/3.05	.050/1.27	HT-0095
	28-32	.054/1.37	.058/1.47	.011/.28	.028/.71-.054/1.37	.115/2.92	.105/2.67	.040/1.02	

NOTES:

1. TERMINAL MATES WITH .025±.002/0.64±0.05  
SQUARE OR ROUND PIN.
- ② WHEN MEASURED ALONG DATUM -E- WITHIN .340/8.64 REF DIM.
3. PRODUCT SPECIFICATION: BUS-12-067.  
APPLICATION SPECIFICATIONS:  
TA-75: TERMINAL DATA FOR USE WITH MINI LATCH HOUSING.  
TA-146: TERMINAL DATA FOR CONTACTS NOT USED IN HOUSINGS.  
TA-210: TERMINAL DATA FOR CONTACTS USED WITH MINI  
ROD HOUSINGS.  
TA-228: APPLICATIONS USING 20 AWG WIRE.  
TA-531: INSTALLING AND REMOVING TERMINALS.
- ④ PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER  
COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
5. THIS PRODUCT IS NOT INTENDED TO BE EXPOSED  
TO MANUFACTURING SOLDERING PROCESSES.
- ⑥ THIS PRODUCT HAS 100% TIN PLATING IN THE  
INTERFACE AND HAS NOT BEEN TESTED FOR WHISKER  
GROWTH IN ALL INTERCONNECT ENVIRONMENTS.
- ⑦ CONTACT SIDE OF TERMINAL WILL HAVE 50μ"/1.27μm  
NICKEL UNDERPLATE OVERALL WITH GOLD FLASH  
REQUIRED INSIDE CONTACT BOX AND WIRE BARREL  
ONLY. BACKSIDE OF TERMINALS TO BE PLATED WITH  
30μ"/0.76μm NICKEL ONLY.

mat'l. code SEE TABLE				surface <input checked="" type="checkbox"/>		tolerance		projection 		product family PV TERMINALS	
ltr	ecn no	dr	date	tolerances unless otherwise specified						title	
AN				angles	linear	.XX±.01/.X±.3 .XXX±.005/.XX±.13 XXXX±.0020/.XXX±.051		INCH/MM		MINI PV™ RECEPTACLE CRIMP TO WIRE	
								scale 1:1		dwg no	
				dr	T. BREWBAKER	2006-04-18				sheet 2 of 6	
				engr	T. BREWBAKER	2006-04-18				47212	
				chr	T. BREWBAKER	2006-04-18				A3	
				appd	T. BREWBAKER	2006-04-18				type Product Customer Drawing	
sheet	revision										
index	sheet										

1		2		3						4		5		6
MATERIAL & PLATING		SPRING THICKNESS DIM H±.0005/0.012	AWG RANGE	REELED NOTE 4	LOOSE NOTE 4	PLATING AVAILABILITY								
1/4 HARD BRASS BODY	Be/Cu SPRING					-000	-000LF	-001	-001LF	-002	-002LF			
CONTACT AREA UNDERPLATING: 50μ"/1.27μ Ni CONTACT AREA: 15μ"/0.38μ Au INSIDE BOX AREA: -000LF Au FLASH -001LF 15μ"/0.38μ Au -002LF 6μ"/0.15μ Au REMAINDER: -000LF SEE NOTE 7 -001LF 15μ"/0.38μ Au -002LF Au FLASH	Au FLASH	.0035/0.089	18-20	48241	48250	NO	YES	NO	NO	NO	NO			
			22-26	48242	48251	NO	YES	NO	NO	NO	NO			
			28-32	48243	48252	NO	YES	NO	NO	NO	NO			
		.0048/0.122	18-20	48244	48253	NO	YES	NO	NO	NO	NO			
			22-26	48245	48254	NO	YES	NO	NO	NO	NO			
			28-32	48246	48255	NO	YES	NO	NO	NO	NO			
		.0058/0.147	18-20	94011	94014	NO	NO	NO	NO	NO	NO	NO	OBS.	
			22-26	94012	94015	NO	NO	NO	NO	NO	NO	NO	OBS.	
			28-32	94013	94016	NO	NO	NO	NO	NO	NO	NO	OBS.	
		.0065/0.165	18-20	48247	48256	NO	YES	NO	NO	NO	NO	NO		
			22-26	48248	48257	NO	YES	NO	NO	NO	NO	NO		
			28-32	48249	48258	NO	YES	NO	NO	NO	NO	NO		
CONTACT AREA UNDERPLATING: 50μ"/1.27μ Ni CONTACT AREA: 30μ"/0.76μ Au INSIDE BOX AREA: -000LF Au FLASH -001LF 30μ"/0.76μ Au -002LF 8μ"/0.2μ Au REMAINDER: -000LF SEE NOTE 7 -001LF 30μ"/0.76μ Au -002LF Au FLASH	Au FLASH	.0035/0.089	18-20	48231	48266	NO	YES	NO	NO	NO	NO			
			22-26	48049	48235	NO	YES	NO	NO	NO	NO	YES		
			28-32	48048	48238	NO	YES	NO	NO	NO	NO	YES		
		.0048/0.122	18-20	48047	48232	NO	YES	NO	NO	NO	NO	YES		
			22-26	48046	48234	NO	YES	NO	NO	NO	NO	YES		
			28-32	48045	48237	NO	YES	NO	NO	NO	NO	YES		
		.0058/0.147	18-20	94017	94019	NO	NO	NO	NO	NO	NO	NO	OBS.	
			22-26	94018	94020	NO	NO	NO	NO	NO	NO	NO	OBS.	
			28-32	93259	94021	NO	NO	NO	NO	NO	NO	NO	OBS.	
		.0065/0.165	18-20	48052	48233	NO	YES	NO	NO	NO	NO	YES*		
			22-26	48051	48236	NO	YES	NO	NO	NO	NO	YES		
			28-32	48050	48239	NO	YES	NO	NO	NO	NO	YES		
* LOOSE PIECE NOT AVAILABLE														

mat'l. code SEE TABLE				surface ✓ tolerance		projection INCH/MM		product family PV TERMINALS	
ltr	ecr no	dr	date	tolerances unless otherwise specified		linear		title	
AN				.XX±.01/.X±.3		scale 1:1		MINI PV™ RECEPTACLE CRIMP TO WIRE	
				.XXX±.005/.XX±.13				dwg no	
				.XXXX±.0020/.XXX±.051				sheet 3 of 6	
				dr	T. BREWBAKER	2006-04-18		size	
				engr	T. BREWBAKER	2006-04-18		A3	
				chr	T. BREWBAKER	2006-04-18			
				appd	T. BREWBAKER	2006-04-18			
sheet index	revision sheet							type Product Customer Drawing	

form: A3

1

2

3

4

5

6

mat'l. code SEE TABLE				surface ✓		tolerance tolerances unless otherwise specified		projection INCH/MM		product family PV TERMINALS	
ltr	ecr no	dr	date	angles	linear	.XX±.01/.X±.3 .XXX±.005/.XX±.13 XXXX±.0020/.XXX±.051		scale 1:1		title MINI PV™ RECEPTACLE CRIMP TO WIRE	
AN										dwg no 47212	
						dr T. BREWBAKER 2006-04-18		FCJ		sheet 3 of 6	
						engr T. BREWBAKER 2006-04-18				size A3	
						chr T. BREWBAKER 2006-04-18					
						appd T. BREWBAKER 2006-04-18					
sheet index	revision									type Product Customer Drawing	

1		2				3				4				5				6							
MATERIAL & PLATING		SPRING THICKNESS		AWG		REELED		LOOSE		PLATING AVAILABILITY															
1/4 HARD BRASS BODY		Be/Cu SPRING		DIM H±.0005/0.012		RANGE		NOTE 4		NOTE 4		-000		-000LF						-001		-001LF		-002	
CONTACT AREA UNDERPLATING: 50μ"/1.27μ Ni CONTACT AREA: 40μ"/1.02μ Au INSIDE BOX AREA: -000LF Au FLASH -001LF 8μ"/0.2μ Au -002LF 8μ"/0.2μ Au REMAINDER: -000LF SEE NOTE 7 -001LF 8μ"/0.2μ Au -002LF Au FLASH		Au FLASH		.0035/0.089		18-20		48276		N/A		NO		NO		NO		NO		NO		YES			
						22-26		47457		47743		NO		YES		NO		YES		NO		YES			
						28-32		47456		47742		NO		YES		NO		YES		NO		YES			
				.0048/0.122		18-20		47441		47713		NO		YES		NO		YES		NO		YES			
						22-26		47439		47712		NO		YES		NO		YES		NO		YES			
						28-32		47437		47711		NO		YES		NO		YES		NO		YES			
		.0058/0.147		18-20		94022		94025		NO		NO		NO		NO		NO		NO		OBS.			
				22-26		94023		94026		NO		NO		NO		NO		NO		NO		OBS.			
				28-32		94024		94027		NO		NO		NO		NO		NO		NO		OBS.			
		.0065/0.165		18-20		47566		47746		NO		YES		NO		YES		NO		YES					
				22-26		47565		47745		NO		YES		NO		YES		NO		YES					
				28-32		47564		47744		NO		YES		NO		YES		NO		YES					
DISCONTINUED						48191		48194																	
DISCONTINUED						48192		48195																	
DISCONTINUED						48193		48196																	
CONTACT AREA UNDERPLATING: 50μ"/1.27μ Ni CONTACT AREA: 75μ"/1.91μ Au INSIDE BOX AREA: -000LF Au FLASH -001LF 75μ"/1.91μ Au -002LF 30μ"/0.76μ Au REMAINDER: -000LF SEE NOTE 7 -001LF 75μ"/1.91μ Au -002LF 15μ"/0.38μ Au		Au FLASH		.0035/0.089		18-20		47785		48014		NO		YES		NO		NO		NO		NO			
						22-26		47784		48015		NO		NO		NO		NO		NO		NO		OBS.	
						28-32		47783		48013		NO		NO		NO		NO		NO		NO		OBS.	
				.0048/0.122		18-20		47220		47707		NO		NO		NO		NO		NO		NO		OBS.	
						22-26		47216		47706		NO		YES		NO		NO		NO		NO			
						28-32		47212		47705		NO		YES		NO		NO		NO		NO			
		.0058/0.147		18-20		94028		94031		NO		NO		NO		NO		NO		NO		OBS.			
				22-26		94029		94032		NO		NO		NO		NO		NO		NO		OBS.			
				28-32		94030		94033		NO		NO		NO		NO		NO		NO		OBS.			

mat'l. code				surface		tolerance		projection		product family			
SEE TABLE				✓				⊕		PV TERMINALS			
ltr		ecr no		dr		date		tolerances unless otherwise specified		title			
AN								.XX±.01/.X±.3		MINI PV™ RECEPTACLE			
								linear		INCH/MM			
								.XXX±.005/.XX±.13					
								.XXXX±.0020/.XXX±.051		scale 1:1			
								dr		T. BREWBAKER 2006-04-18		dwg no	
								engr		T. BREWBAKER 2006-04-18		sheet 4 of 6	
								chr		T. BREWBAKER 2006-04-18		size	
								appd		T. BREWBAKER 2006-04-18		A3	
sheet		revision								FCI		type	
index		sheet										Product Customer Drawing	

1		2				3				4				5				6			
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mat'l. code SEE TABLE				surface ✓		tolerance tolerances unless otherwise specified		projection INCH/MM		product family PV TERMINALS	
ltr	ecr no	dr	date	angles	linear	.XX±.01/.X±.3 .XXX±.005/.XX±.13 XXXX±.0020/.XXX±.051		scale 1:1		title MINI PV™ RECEPTACLE CRIMP TO WIRE	
AN										dwg no 47212	
						dr T. BREWBAKER 2006-04-18		engr T. BREWBAKER 2006-04-18		sheet 4 of 6	
						chr T. BREWBAKER 2006-04-18		appd T. BREWBAKER 2006-04-18		size A3	
sheet index		revision sheet								type Product Customer Drawing	

MATERIAL & PLATING		SPRING THICKNESS DIM H±.0005/0.012	AWG RANGE	REELED NOTE 4	LOOSE NOTE 4	PLATING AVAILABILITY						
1/4 HARD BRASS BODY	Be/Cu SPRING					-000	-000LF	-001	-001LF	-002	-002LF	
PRE-PLATED: UNDERPLATING: 50μ"/1.27μ Ni OVERPLATING: 100-200μ"/2.54-5.08μ 60/40 TIN LEAD "LF NOT AVAILABLE" SEE LEAD-FREE EQUIVALENTS BELOW	Sn PLATED	.0035/0.089	22-26	47445	47747	NO	NO	NO	NO	NO	NO	OBS.
			28-32	47446	47748	NO	NO	NO	NO	NO	NO	OBS.
		.0048/0.122	18-20	47221	47716	NO	NO	NO	NO	NO	NO	OBS.
			22-26	47217	47715	NO	NO	NO	NO	NO	NO	OBS.
		.0058/0.147	28-32	47213	47714	NO	NO	NO	NO	NO	NO	OBS.
			18-20	94034	94037	NO	NO	NO	NO	NO	NO	OBS.
		.0065/0.165	22-26	94035	94038	NO	NO	NO	NO	NO	NO	OBS.
			28-32	94036	94039	NO	NO	NO	NO	NO	NO	OBS.
		.0065/0.165	18-20	47648	47749	NO	NO	NO	NO	NO	NO	OBS.
			22-26	47649	47750	NO	NO	NO	NO	NO	NO	OBS.
		.0065/0.165	28-32	47650	47751	NO	NO	NO	NO	NO	NO	OBS.
PRE-PLATED: -000LF 100-160μ" 2.54-4.06μ Sn (LEAD-FREE) NOTE 6	Sn PLATED	.0035/0.089	22-26	47445	47747	NO	YES	NO	NO	NO	NO	
			28-32	47446	47748	NO	YES	NO	NO	NO	NO	
		.0048/0.122	18-20	47221	47716	NO	YES	NO	NO	NO	NO	
			22-26	47217	47715	NO	YES	NO	NO	NO	NO	
		.0058/0.147	28-32	47213	47714	NO	YES	NO	NO	NO	NO	
			18-20	94034	94037	NO	NO	NO	NO	NO	NO	OBS.
		.0065/0.165	22-26	94035	94038	NO	NO	NO	NO	NO	NO	OBS.
			28-32	94036	94039	NO	NO	NO	NO	NO	NO	OBS.
		.0065/0.165	18-20	47648	47749	NO	YES	NO	NO	NO	NO	
			22-26	47649	47750	NO	YES	NO	NO	NO	NO	
		.0065/0.165	28-32	47650	47751	NO	YES	NO	NO	NO	NO	

mat'l. code SEE TABLE				surface ✓		tolerance tolerances unless otherwise specified		projection INCH/MM		product family PV TERMINALS	
ltr	ecr no	dr	date	angles	linear	.XX±.01/.X±.3 .XXX±.005/.XX±.13 XXXX±.0020/.XXX±.051		scale 1:1		title MINI PV™ RECEPTACLE CRIMP TO WIRE	
AN										sheet 5 of 6	
				dr	T. BREWBAKER	2006-04-18		FCJ		size A3	
				engr	T. BREWBAKER	2006-04-18				dwg no 47212	
				chr	T. BREWBAKER	2006-04-18				type Product Customer Drawing	
				appd	T. BREWBAKER	2006-04-18					
sheet index	revision sheet										

MATERIAL & PLATING		SPRING THICKNESS DIM H±.0005/0.012	AWG RANGE	REELED NOTE 4	LOOSE-PIECE NOTE 4	
1/4 HARD BRASS BODY	Be/Cu SPRING					
UNDERPLATING: 50u"X1.27u Ni CONTACT AREA: 30u"/0.76u GXT INSIDE BOX AREA: -600 Au FLASH REMAINDER: -600 Au FLASH	Au FLASH	.0035/0.089	18-20	48231-600	48266-600	OBS.
			22-26	48049-600	48235-600	OBS.
			28-32	48048-600	48238-600	OBS.
		.0048/0.122	18-20	48047-600	48232-600	OBS.
			22-26	48046-600	48234-600	OBS.
			28-32	48045-600	48237-600	OBS.
		.0058/0.147	18-20	94017-600	94019-600	OBS.
			22-26	94018-600	94020-600	OBS.
			28-32	93259-600	94021-600	OBS.
		.0065/0.165	18-20	48052-600	48233-600	OBS.
			22-26	48051-600	48236-600	OBS.
			28-32	48050-600	48239-600	OBS.

mat'l. code SEE TABLE				surface <input checked="" type="checkbox"/>		tolerance		projection		product family PV TERMINALS	
ltr	ecn no	dr	date	tolerances unless otherwise specified				INCH/MM scale 1:1		title <b>MINI PV™ RECEPTACLE CRIMP TO WIRE</b>	
AN				angles		linear					
										sheet 6 of 6	
				dr		T. BREWBAKER 2006-04-18				size <b>A3</b>	
				engr		T. BREWBAKER 2006-04-18					
				chr		T. BREWBAKER 2006-04-18					
				appd		T. BREWBAKER 2006-04-18					
sheet index		revision sheet									