

## **1.5 MM PITCH AMP MINI CT CONNECTOR** SERIES

## QUICK REFERENCE GUIDE

TE Connectivity's (TE) AMP Mini CT connectors are miniature wire-to-board and wire-to-wire connectors. Like the standard AMP CT connector series, these connectors are tailored for improved harness productivity and feature a compact design with contacts on 1.5 mm pitch. Wire-side connectors can be used to produce a variety of harness styles by fully automatic high-speed assembling machines.

### **FEATURES AND BENEFITS**

- 2 kinds of termination method: IDC, crimp
- Discrete wire interconnect
- Circuits range from 2-20 single row, 22-40 dual row
- AWG 24~28
- Both thru-hole and SMT mounting styles are available
- Kinks for self-retention on boards
- Many components are recognized under the component program of Underwriters Laboratories Inc., file No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

### **PRODUCT APPLICATION**

- Business equipment
- Industrial machines
- IoT / Smart Devices
- PC, Printer and Fax
- C-TV
- Audio
- Air conditioner
- LED lighting
- Where signals or power are routed

#### HOW TO SELECT AN AMP MINI CT CONNECTOR PART NUMBER

The charts on this page highlight the relationship between the number of contacts (positions) to the part number. Please see the sample chart below that was designed to help you select the correct part number for your needs. For single digit position to dash numbers, attach the digit to the end base number. For double digit position to dash numbers, attach the first digit to the front of the part number, add a dash and the base part number, then follow the base part number with a dash and the second digit.

Example Base Part Number	Your criteria	Example Positio	n to	Dash	Sele	ctio	n	End Part Number Based On Criteria
		Position	8	9	10	11	12	
353293	You require an 8 position MT housing	Dash Number	-8	-9	-10	-11	-12	353293-8
353293	You require a 12 position MT housing	Dash Number	-8	-9	-10	-11	-12	1-353293-2

## MASS TERMINATION (MT) VS. CRIMP POKE

### MASS TERMINATION (MT) VS. CRIMP POKE

#### МТ

- Time savings
- Preloaded IDC contacts
- Automation
- Mates with all headers

#### AMP Mini CT MT Housing : 353293



Unstripped wire inserted into MT housing.

#### **Crimp Poke**

- Cost effective
- Flexibility (AWG)
- Manual labor
- Mates with all headers

#### AMP Mini CT Crimp Contact : 353907



AMP Mini CT Crimp Housing : 353908



Contact crimped onto a stripped wire to be inserted into a crimp housing.

## **CABLE SIDE CONNECTORS**

## **RECEPTACLE CONNECTORS (WIRE APPLICATION)**

Description	PN	Photo								Ρ	osit	ion	to	Das	sh						
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
MT receptacle housing - AWG : 26-28	353293	A	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
Mating Part Numbers: 292206; 292207	7; 292227;	292228; 2	292	239	; 29	223	1; 29	9221	5; 2	922	08;	292	216				Spe	ecifi	cati	ons:	С, Х

## CONTACTS

Description	PN	Photo	Specifications
Reel-AWG: 24-28	353907-1	в	B,Y
Loose Piece - AWG: 24-28	353918-1	В	B,Y

## **CRIMP TYPE HOUSING**

Description	PN	Photo								ĺ	Pos	itio	ı to	Das	sh						
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Crimp receptacle housing - White	353908	с	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
Mating Part Numbers: 292206; 29220	)7; 292227; 2	292228; 29	922	39;	292	2231	; 29	221	5; 2	922	208;	292	216				S	peci	ifica	tion	is: B

# CABLE SIDE CONNECTORS : TOOLING OPTIONS

## **APPLICATION TOOLING**

AMP Mini CT PN	Description	Tooling PN	Tooling Description	Application Specification	Instruction Sheet
393293	MT Housing	937317-1	Pistol Tool	114-5223	411-5826
353907-1	Crimp Contact -	1426169-1	Leadmaker Applicator	114-5245	411-78049
	Strip	1426169-2	Bench Application	114-5245	411-78049
179518-1	Crimp Contact - Loose	1729069-1	Hand Tool	114-5245	411-78106

Automated tooling options are also available. Call Tooling Sales at 800-722-1111 (717-810-2082) for more information.

## AMP MINI CT CONNECTOR STYLES



#### 1 DUAL ROW ASSEMBLIES

Two single row receptacle housings, either MT or crimp, that use a holder to mate with a dual row header.



Designed to secure the SMT headers onto the PCB



A mechanical feature that helps orient the headers onto the PCB.

#### PANEL-MOUNT

Transmits signal through a notch in a panel or a PCB and requires two housings to complete a circuit.



### SMT INVERTED THRU BOARD

Positioned thrrough a cutout or notch in a PCB and requires only one housing to complete a circuit. The innovative design avoids wire dress management issues.

Description	PN	Photo									Posi	tio	n to	Da	sh						
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
T/H Type Horizontal-Mount Type, w/o Boss	292206	D	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
T/H Type Vertical-Mount Type, w/ Boss	292207	E	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
SMT Type Horizontal-Mount Type, w Boss	292227	F	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20

Description	PN	Photo								Ρ	osit	tion	to	Das	sh						
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
SMT Type Horizontal-Mount Type, w/o Boss	292228	G	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
SMT Type Vertical-Mount Type, w Boss	292230	н		-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
SMT Type Vertical-Mount Type, w/o Boss	292231	ı		-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
Mating Part Numbers: (MT) 353293 or (	Crimp) 35	3908 w/	353	390	7-1	or 3	539	918-	1								Spec	ifica	atio	ns: /	— А, Х

## SINGLE ROW POST HEADER ASSEMBLIES : PANEL-MOUNT

Description	PN	Photo									Pos	ition	to C	Dash							
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Single Row Panel-Mount	292215	J	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20
Mating Part Numbers:	(MT) 3532	293 or (Cr	imp	) 35	3908	3 w/	353	907	-1 or	3539	18-1										

Specifications:  $\mathsf{A}, \mathsf{X}$ 

## **DUAL ROW HEADERS**

Description	PN	Photo				Pc	sitio	n to C	ash			
			22	24	26	28	30	32	34	36	38	40
Receptacle Housing Connector Mounting Holder	353294	к	-22	-24	-26	-28	-30	-32	-34	-36	-38	-40
Note: Two receptacle housing	s are applie	ed per hol	der a	nd one	e hold	er per	dual r	ow he	ader			
Mating Part Numbers: 2 x (MT) 353293 or 2 x (Cri	mp) 35390	8 w/ 3539	907-1	or 353	3918-1							

Specifications: C, X

### **DUAL ROW POST HEADER ASSEMBLIES : BOARD-MOUNT**

Description	PN	Photo				Pc	sitio	n to D	ash			
			22	24	26	28	30	32	34	36	38	40
Dual Row T/H Type/ Vertical-Mount	292208	L	-22	-24	-26	-28	-30	-32	-34	-36	-38	-40
Dual Row SMT Type/ Vertical Mount Type w/Boss	292229	м		-24	-26	-28	-30	-32	-34	-36	-38	-40
Dual Row T/H Type/ Horizontal Mount w/ Board Lock	292262	N	-22	-24	-26	-28	-30	-32	-34	-36	-38	-40
Mating Part Numbers: (MT) 353293 or (Crimp) 353908	w/ 353907	-1 or 3539	918-1									

### **DUAL ROW POST HEADER ASSEMBLIES : PANEL-MOUNT**

Description	PN					Position	to Dash				
		22	24	26	28	30	32	34	36	38	40
Dual Row Panel-Mount	292216	-22	-24	-26	-28	-30	-32	-34	-36	-38	-40
Mating Part Numbers: 35	3294 w/ 2 :	KMT or 2	x Crimp S	ingle Rov	v Housing	S					·

Specifications: C, X

Specifications: A, X

### INVERTED THRU BOARD

Description	PN	Photo			Posit	tion to Dash		
			1	2	3	4	5	6
SMT Type Thru Board	2106091	ο	-1	-2	-3	-4	-5	-6
Matin	g Part Num	nbers:MT 3	53293 or crii	mp 353908 w	ı/ 333907-1 or	333918-1 <b>Speci</b>	ications: D, Z	

#### MINI CT CABLE ASSEMBLY DESCRIPTION PN

Description	PN	Position to Dash						
		1	2	3	4	5	6	
Cable Assembly	2058943	-1	-2	-3	-4	-5	-6	

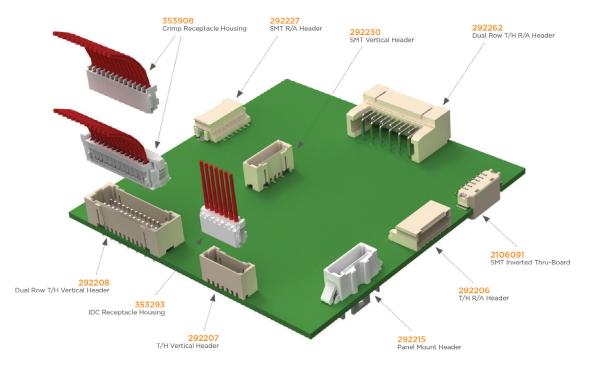
## **PRODUCT/APPLICATION SPECIFICATION**

## RATINGS

Product Specs			Operating Current (Amps)						
		Voltage	24 AWG	26 AWG	28 AWG	Temperature			
Α	108-60018	50 V (AC/DC)	-	2	1	-30 to 105°C			
в	108-60025	50 V (AC/DC)	3	2.5	1.5	-30 to 105°C			
с	108-5525	50 V AC	-	2	2	-65 to 105°C			
D	108-2376	50 V (AC/DC)	3	2.5	1.5	-30 to 105°C			

Application Specs					
Х	114-5223				
Y	114-5223				
Z	114-13245				

## **AMP MINI CT MOUNT STYLES**



## **CABLE ASSEMBLIES**

For convenience, a selection of double-ended cable assemblies is available. These cable assemblies are useful for prototyping or for small production runs. For additional sizes, lengths or connector styles, please reach out to the TE sales team or to customer care.

PN	Description	Length	Positions	Housing PN	Contact PN	Wire Gauge	Wire Temp Rating	Wire Voltage Rating	Wire Color
2405870-1	AMP Mini CT 2P 300MM CABLE ASSEMBLY 6-353908-2	300 mm	2	6-353908-2	353907-1	24 AWG	80° C	300 V	Orange
2405870-3	AMP Mini CT 3P 300MM CABLE ASSEMBLY 6-353908-3	300 mm	3	6-353908-3	353907-1	24 AWG	80° C	300 V	Orange
2405870-4	AMP Mini CT 4P 300MM CABLE ASSEMBLY 6-353908-4	300 mm	4	6-353908-4	353907-1	24 AWG	80° C	300 V	Orange
2405870-5	AMP Mini CT 5P 300MM CABLE ASSEMBLY 6-353908-5	300 mm	5	6-353908-5	353907-1	24 AWG	80° C	300 V	Orange
2405870-6	AMP Mini CT 6P 300MM CABLE ASSEMBLY 6-353908-6	300 mm	6	6-353908-6	353907-1	24 AWG	80° C	300 V	Orange
2405870-7	AMP Mini CT 7P 300MM CABLE ASSEMBLY 6-353908-7	300 mm	7	6-353908-7	353907-1	24 AWG	80° C	300 V	Orange
2405870-8	AMP Mini CT 8P 300MM CABLE ASSEMBLY 6-353908-8	300 mm	8	6-353908-8	353907-1	24 AWG	80° C	300 V	Orange
2405870-2	AMP Mini CT 10P 300MM CABLE ASSEMBLY 7-353908-0	300 mm	9	7-353908-0	353907-1	24 AWG	80° C	300 V	Orange

#### **FREQUENTLY ASKED QUESTIONS**

#### What wire gauge will you be using?

There is more flexibility with AWG when using Crimp (24~28 AWG) vs. MT (26~28 AWG).

#### Are the connectors available for IDC?

Yes, we offer an MT version that is preloaded with IDC contacts.

#### Is your process automated?

MT housings are suitable for automated processes.

#### What current, voltage and operating temperature is required?

Please see product specification information on the charts on page 8 of this document.

#### Which is a more standard header, with or without a locating boss?

The most standard headers tend to have a locating boss as it makes it easier for the customer to align the connector onto their board.

#### What special retention mechanisms are available to provide stability?

These product's T/H headers have a staggered tine design to provide stability.

#### What are my tooling options?

TE offers comprehensive tooling options including manual pistol grip tooling, manual mini-press, pneumatic mini-press, semi-auto DECAM and a fully automatic DECAM assembly machine. For more information, please visit te.com or call the tooling assistance center at 800-722-1111 or 717-810-2082

#### What if my application is constrained for space with the 1.5 mm AMP Mini CT?

TE continues to develop and design interconnects that meet the needs of miniaturized applications. If your application is constrained for space, take a look at our AMP Micro CT product line.

#### Does TE offer pre-made cable assemblies?

Yes, we do offer single ended AMP Mini CT pigtails in various lengths often used in lighting applications. Please reference part number 2058943-x.

#### te.com

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