







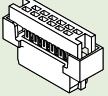
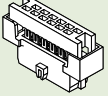
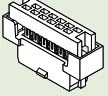
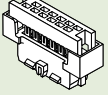
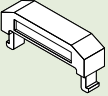


Wire-to-Board System

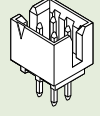
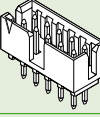
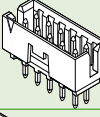
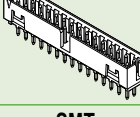
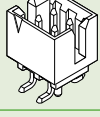
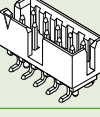
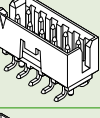
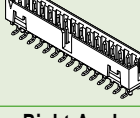
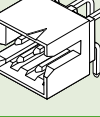
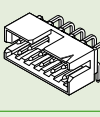
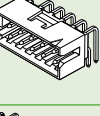
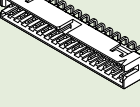
Early Entry System Terminals			
	Order No.	Packaging	Plating
	50394-8053	Reel	Gold Flash
	50394-8300	Bag	Gold Flash
	50394-8051	Reel	15µ" min. Select Gold
	50394-8100	Bag	15µ" min. Select Gold
	50394-8052	Reel	30µ" min. Select Gold
	50394-8200	Bag	30µ" min. Select Gold

Crimp Housings			
	Order No.	Circuits	Features
	51110-XX50	4 to 34	Plain
	51110-XX51	8 to 12	Center Polarization Key 
	51110-XX60	4 to 12	Center Polarization Ramp 
	51110-XX51	14 to 34	Locking Ramp and Polarization Key 

IDT Housings and Strain Relief			
	Order No.	Circuits	Features
	87568-XX61	10, 12, 14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50	Plain Front 15µ" Gold
	87568-XX62		Plain Front 30µ" Gold
	87568-XX41	14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50	Center Polarization Ramp 30µ" Gold
	87568-XX42		Center Polarization Ramp 15µ" Gold
	87568-XX72	10 and 12	Center Locking Ramp 15µ" Gold
	87568-XX71		Center Locking Ramp 30µ" Gold
	87568-XX91	14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50	Locking Ramp and Polarization Key 15µ" Gold
	87568-XX92		Locking Ramp and Polarization Key 30µ" Gold
	87569-10XX	10, 12, 14, 16, 20, 22, 24, 26, 30, 34, 40, 44 and 50	Strain Relief

*Center Polarization Key mates with center polarization slot on headers.

**Center Locking Ramp mates with center polarization slot on headers and center locking window on headers.

Shrouded Headers			
Through Hole	Order No.	Circuits	Features
	87331-XX20	4 to 6	Plain 15µ" Gold
	87331-XX21		Plain 30µ" Gold
	87331-XX20	8 to 12	Center Polarization Slot 15µ" Gold
	87331-XX21		Center Polarization Slot 30µ" Gold
	87331-XX41	4 to 12	Center Locking Window 15µ" Gold
	87331-XX42		Center Locking Window 30µ" Gold
	87331-XX20	14 to 50	Center Polarization Slot and Locking Window 15µ" Gold
	87331-XX21		Center Polarization Slot and Locking Window 30µ" Gold
SMT			
	87332-XX20	4 to 6	Plain 15µ" Gold
	87332-XX21		Plain 30µ" Gold
	87332-XX20	8 to 12	Center Polarization Slot 15µ" Gold
	87332-XX21		Center Polarization Slot 30µ" Gold
	87332-XX10	4 to 12	Center Locking Window 15µ" Gold
	87332-XX11		Center Locking Window 30µ" Gold
	87332-XX20	14 to 50	Center Polarization Slot and Locking Window 15µ" Gold
	87332-XX21		Center Polarization Slot and Locking Window 30µ" Gold
Right Angle			
	87333-XX20	4 to 6	Plain 15µ" Gold
	87333-XX21		Plain 30µ" Gold
	87333-XX20	8 to 12	Center Polarization Slot 15µ" Gold
	87333-XX21		Center Polarization Slot 30µ" Gold
	87333-XX31	4 to 12	Center Locking Window 15µ" Gold
	87333-XX32		Center Locking Window 30µ" Gold
	87333-XX20	14 to 50	Center Polarization Slot and Locking Window 15µ" Gold
	87333-XX21		Center Polarization Slot and Locking Window 30µ" Gold

Board-to-Board System

Through Hole				SMT	
Series/Description					
87049 Right Angle	87089 Vertical	87331 Vertical	87333 Right Angle	87267 Vertical	87332 Vertical
Overall Mating Heights					

	Series	Description	Contact Point	Overall Height	Circuits	Overall Mating Heights					
Through Hole											
	79107	Top Entry	1.50mm (.059")	4.44mm (.175)	4 to 50	8.44mm (.332")	5.94mm (.234")	6.94mm (.273")	6.94mm (.273")	7.14mm (.281")	8.14mm (.320")
	79108	FPC/FPC Top Entry									
	87380	FPC/PCB Top Entry	0.90mm (.035")	4.00mm (.157")	6 to 50	8.00mm (.314")	5.50mm (.216")	6.50mm (.256")	6.50mm (.265")	6.70mm (.264")	7.70mm (.303")
	87264	Side Entry	1.50mm (.059")	4.00 by 5.00mm (.157 by .197")	8 to 50	9.00mm (.354")	6.50mm (.256")			7.70mm (.303")	

SMT											
	79109	Top/Bottom Entry	1.50mm (.059")	4.65mm (.183")	4 to 50	8.65mm (.341")	6.15mm (.242")	7.15mm (.281")	7.15mm (.281")	7.35mm (.289")	8.35mm (.329")
	87263	Bottom Entry	1.30mm (.051")	2.80mm (.110")	4 to 44	8.38mm (.330")	5.88mm (.231")			7.08mm (.279")	
	87340	Top Entry	0.90mm (.035")	2.15mm (.085")	4 to 20	6.15mm (.242")	3.65mm (.144")			4.85mm (.191")	
	87381	Top Entry	1.70mm (.067")	4.50mm (.177")	6 to 50	8.50mm (.335")	6.00mm (.236")	7.00mm (.276")	7.00mm (.276")	7.20mm (.283")	8.20mm (.323")
	87368	Side Entry	1.50mm (.059")	4.90 by 5.00mm (.193 by .197")	8 to 50	9.00mm (.354")	6.50mm (.256")			7.70mm (.303")	

Unshrouded Headers					
	Order No.	Circuits	Features	Mating Length	Tail Length
	87089-XX16	4 to 50	15µ" Gold	4.00mm (.158")	2.60mm (.102")
	87089-XX17		30µ" Gold		
	87267-XX50	8 to 50	With Pegs 15µ" Gold	3.80mm (.150")	1.20mm (.047")
	87267-XX51		With Pegs 30µ" Gold		
	87267-XX14	4 to 50	Without Pegs 15µ" Gold		
	87267-XX15		Without Pegs 30µ" Gold		
	87049-XX16	4 to 50	15µ" Gold	4.00mm (.158")	2.60mm (.102")
	87049-XX17		30µ" Gold		



Milli-Grid™ 2.00mm (.079") Pitch Interconnection System

Features and Benefits

Milli-Grid Interconnection System

- Offers a 40% savings in PCB real estate as compared to the standard 2.54mm (.100") pitch connector system

Milli-Grid, IDT

- Early entry system terminals for long pin wipe
- Optional polarization key and friction locking ramps provide strong retention force to the header
- Strain relief adds greater retention to cable
- Designed for 1.00mm (.039") pitch 28 AWG stranded flat ribbon cable
- Replaces old 87259 Series

Reference Information

UL File No.: E29179

CSA File No.: LR19980-182

Mates with: 0.50mm (.020") square pin headers

Use with: IDT— 87569 Strain relief
24500 Stranded flat ribbon cable

Electrical

Voltage: 125V AC

Current: 1.0 to 2.0A

Contact Resistance: 15 to 25mΩ max.

Dielectric Withstanding Voltage: 500V AC (rms)

Insulation Resistance: 1000 MΩ min.

Mechanical

Mating Pin Length: 2.50 to 4.20mm (.098 to .165")

Physical

Housing: Black high-temperature, UL 94V-0

Contacts: Phosphor Bronze

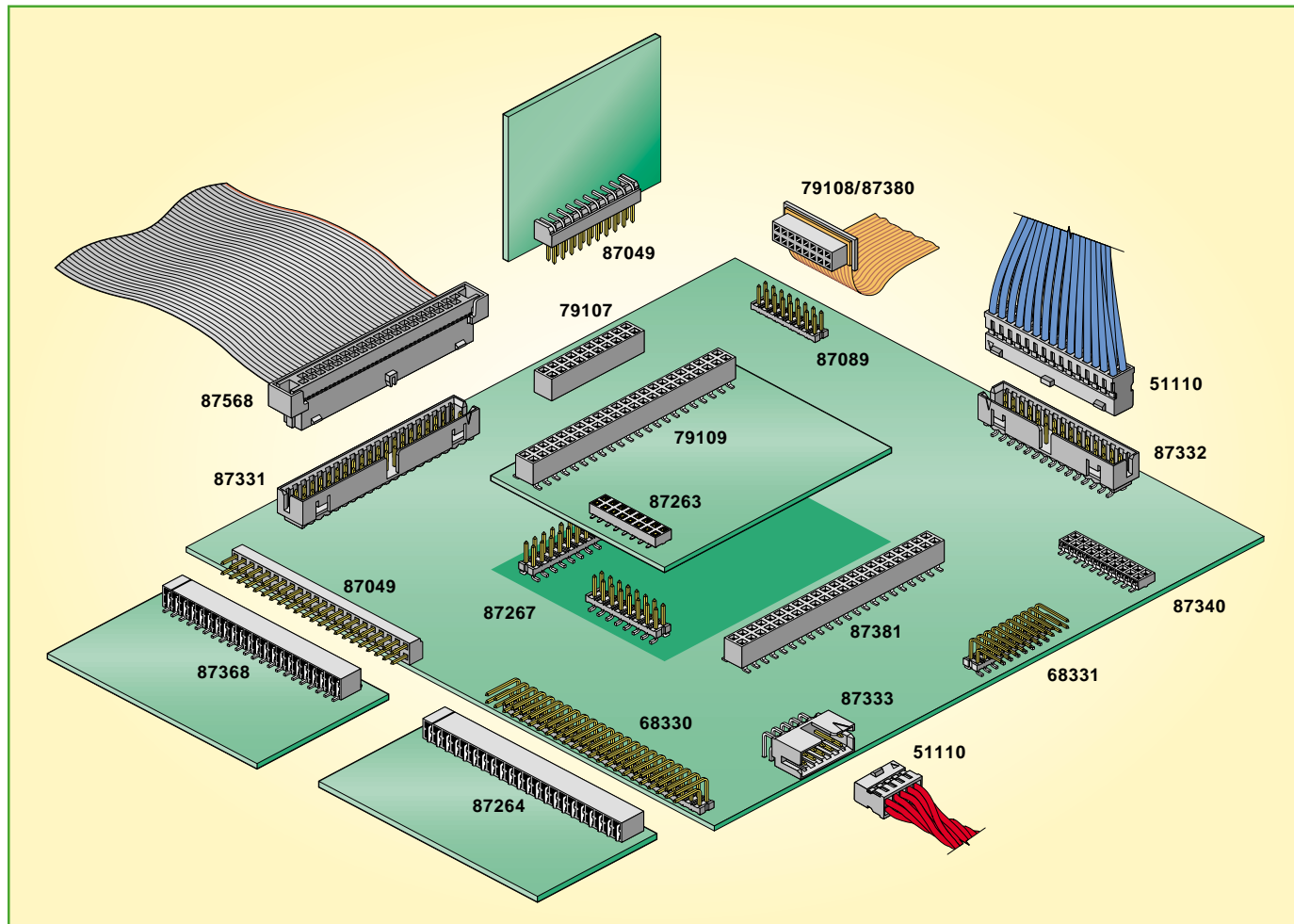
Operating Temperature: -55 to +105° C

Soldering Temperature: +245±5° C for 5±0.5 seconds

Infra-red Heat: +260±5° C for 12±2 seconds

APPLICATION TOOLING

Crimp Tooling			IDT Tooling		
Description	Order No.	Wire Gauge	Description	Order No.	Wire Gauge
Hand Tool	11-01-0204	24, 26, 28 and 30 AWG	Hand Tool Module	62100-2000	1.00mm (.039") 28 AWG Flat Ribbon Cable
FineAdjust Applicator	83820-7500		Pistol Grip	63600-0478	
FineAdjust Spare Tool Kit	68320-7570		Ribbon Cable Power Adapter	11-31-3337	
TM-42 Press and Die	11-04-0771		Manual Press Tool Kit Only	62100-3200	
TM-42 Terminator Die	11-40-2278		Standard Manual Press	11-31-6356	
TM-42 Spare Tool Kit	11-40-3279				
Extraction Tool	11-26-0100				



APPLICATION EXAMPLES

Office Machines

- Printers
- Fax Machines
- Scanners
- Copiers

Computers / Peripherals

- Disk Drives
- Storage
- Servers
- Modems
- Motherboards
- Monitors

Measuring / Analyzing Equipment

- Security Systems / Alarms
- Medical Monitoring
- Lab Equipment

Entertainment

- Set-top Boxes
- Car Radios
- Video / DVD Products

Other Applications

- Vending Machines
- Gaming Machines
- Pagers
- Exercise Equipment



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