

MEMORY MODULE SOCKETS

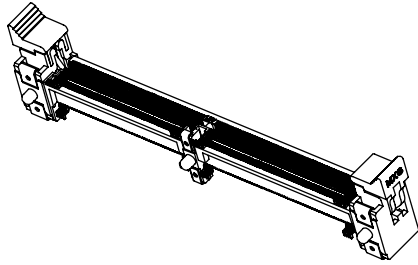
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0.60mm (.0236") Pitch DDR2 miniDIMM Socket

78001/87782/87783/87918
SMT



Features and Benefits

- Small pitch permits maximum utilization of space available on the PCB
- Small form factor allows miniDIMM to fit into slim enclosures
- Surface Mount Technology for easy processing and ability to utilize both sides of PCB
- Solder pads at both ends and center of housing provide additional mechanical strength after soldering
- Robust dual latches provide excellent module retention and easy ejection of module
- Accepts JEDEC MO-244 and MO-258 insures 100% industry compatibility
- Polarization keys assure correct module orientation
- Designated pick-and-place area allows for automated placement on PCB

Reference Information

Product Specification: PS-78001-001, PS-87782-027,
PS-87783-001 and PS-87918-001

Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: See table
Designed In: Millimeters

Electrical

Voltage: 30 VRMS at 60 Hz
Current: 1.0A at 30°C temperature rise
Contact Resistance: 87782—30 milliohms max.
87783—40 milliohms max.
78001 and 87918—50 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 3N min.
Mating Force: 200 circuits—195N
244 circuits—238N
Latch Actuation Force: 45N max. per latch
Durability: 25 cycles

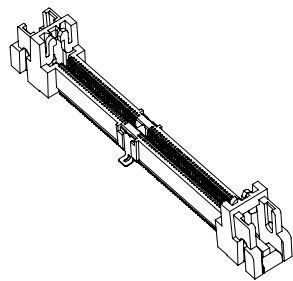
Physical

Housing: Black LCP, UL 94V-0
Latches: Off-white high-temperature nylon, UL 94V-0
Contact: Copper Alloy
Plating: Contact Area—0.76µm (30µ") Gold
Solder Tail Area—Tin
Underplating: Nickel

Circuits	Voltage Key	Order No.				Mates With	Lead-free
		Reverse Right Angle	Vertical	22.5° Angle Surface Mount	Right Angle		
244	1.8V	78001-1244	87782-2001	87783-0001	87918-0001	JEDEC MO-244 Modules	Yes
	2.5V	78001-2244	87782-2002	87783-0002	87918-0002		
200	1.8V	78001-1200	87782-2201	87783-0201	87918-0201	JEDEC MO-258 Modules	
	2.5V	78001-2200	87782-2202	87783-0202	87918-0202		

0.60mm (.0236") Pitch DDR2 miniDIMM Socket

87838
Vertical, SMT



Features and Benefits

- Small pitch permits maximum utilization of space available on the PCB
- Small form factor allows miniDIMM to fit into slim enclosures
- Surface Mount Technology for easy processing and ability to utilize both sides of PCB
- Solder pads at both ends and center of housing provide additional mechanical strength after soldering
- Robust dual latches provide excellent module retention and easy ejection of module
- Polarization keys assure correct module orientation
- Pick-and-place cap allows for automated placement on PCB

Reference Information

Product Specification: PS-87838-002
Packaging: Embossed tape on reel
UL File No.: E29179
CSA File No.: LR19980
Mates With: 1.0mm thick memory module
Designed In: Millimeters

Electrical

Voltage: 30 VRMS at 60 Hz
Current: 1.0A at 30°C temperature rise
Contact Resistance: 30 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Mating Force: 136.5N
Durability: 25 cycles

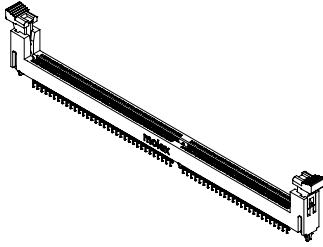
Physical

Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Contact Area—0.76µm (30µ") Gold
Solder Tail Area—Tin
Underplating: Nickel

Circuits	Order No.	Lead-free
140	87838-0002	Yes

1.00mm (.039") Pitch Fully Buffered DIMM Socket

48206
Vertical



Features and Benefits

- Accepts JEDEC MO-256 module for 100% industry compatibility
- Dual ejector latches for easy module removal with features to minimize micro motion
- Beveled metal pin provides PCB retention during and after soldering
- Enables hot plug and hot swap
- Simple through-hole design supports low-cost board assembly process

Reference Information

Product Specification: PS-48206-001
Packaging: Tray
Mates With: JEDEC MO-256 modules
Designed In: Millimeters

Electrical

Voltage: 30V
Current: 0.5A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Insertion Force to PCB: 66.64N
Mating Force: 98.00N
Unmating Force: 2.94N
Durability: 10 cycles

Physical

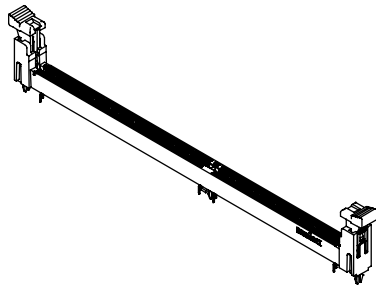
Housing: Glass-filled PA polyimide (nylon), UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—See table
Solder Tail Area—100µ" Tin
Underplating: 50µ" Nickel
PCB Thickness: 1.60mm (.062")

Circuits	Order No.	Housing	Latch Color	Plating Contact	PC Tail Length	Lead-free
240	48206-0001	Nylon 4/6, Glass-Filled	White	15µ" Gold	2.67mm (.105")	Yes
	48206-0002			30µ" Gold	2.67mm (.105")	
	48206-0003			15µ" Gold	3.18mm (.125")	
	48206-0004			30µ" Gold	3.18mm (.125")	
	48206-0005			Gold Flash	2.67mm (.105")	
	48206-0006			Gold Flash	3.18mm (.125")	
	48206-0101		Black	15µ" Gold	2.67mm (.105")	
	48206-0102			30µ" Gold	2.67mm (.105")	
	48206-0103			15µ" Gold	3.18mm (.125")	
	48206-0103			15µ" Gold	3.18mm (.125")	

Circuits	Order No.	Housing	Latch Color	Plating Contact	PC Tail Length	Lead-free
240	48206-0104	Nylon 4/6, Glass-Filled	Black	30µ" Gold	3.18mm (.125")	Yes
	48206-0105			Gold Flash	2.67mm (.105")	
	48206-0106			Gold Flash	3.18mm (.125")	
	48206-9001			15µ" Gold	2.67mm (.105")	
	48206-9002	Nylon 6/6, Glass-Filled	White	30µ" Gold	2.67mm (.105")	
	48206-9003			15µ" Gold	3.18mm (.125")	
	48206-9004			30µ" Gold	3.18mm (.125")	
	48206-9005			Gold Flash	2.67mm (.105")	
	48206-9006			Gold Flash	3.18mm (.125")	
	48206-9006			Gold Flash	3.18mm (.125")	

1.00mm (.039") Pitch Fully Buffered DIMM Socket

78061/87917



Features and Benefits

- High-temperature thermoplastic housing withstands lead-free solder processing
- 100% industry compatibility
- Dual ejector latches ensure easy module insertion and removal with minimal micro motion
- Built in end key design ensures correct insertion of fully-buffered memory module
- Forklocks provide proper socket to PCB alignment and retention during and after soldering

Reference Information

Product Specification: PS-78061-001, PS-87917-001
Packaging: Tray
UL File No.: E29179 (87917)
CSA File No.: LR19980 (87917)
Mates With: 1.27mm (0.5") thickness module card
Designed In: Millimeters

Electrical

Voltage: 30V AC (mc)/DC
Current: 1.0A
Contact Resistance: 30 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.
Voltage Key: 1.8V center

Mechanical

Contact Retention to Housing: Contact—3N min.
Forklock—13N min.

Insertion Force to PCB: 66.5N
Mating Force: 87917—205.0N max.
78061—179.5N max.
Latch Actuation Force: 44N
Durability: 25 Cycles

Physical

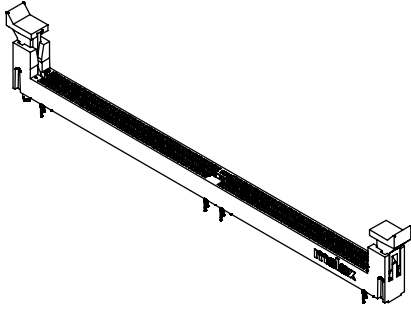
Housing: See table
Contact: Copper Alloy
Plating: Contact Area—See table
Solder Tail Area—Tin
Underplating: Nickel

Circuits	Order No.		Entry	Mounting	Housing	PCB Thickness	Latch Color	Lead-free			
	0.38µm (15µ") Gold	0.76µm (30µ") Gold									
240	78061-0001	78061-0011	Vertical	Through Hole	Black glass-filled nylon, UL 94V-0	1.60mm (.063")	Off-white	Yes			
	78061-0002	78061-0012				2.40 mm (.094")					
	78061-0051	78061-0061				1.60mm (.063")	Black				
	78061-0052	78061-0062				2.40 mm (.094")					
	87917-0001	87917-0062				28.5° Angle	Through Hole		Black glass-filled LCP, UL 94V-0	1.60mm (.063")	Off-white
	87917-0012	87917-0011								2.40 mm (.094")	

1.00mm (.039") Pitch DDR2 DIMM Socket

87705/87746/87966

Vertical



Features and Benefits

- High-temperature thermoplastic housing withstands lead-free solder processing
- Complies with all JEDEC standards, ensures 100% industry compatibility
- Dual ejector latches for easy module insertion and removal with minimal micro-motion
- Added contact wipe for improved contact reliability between socket and module card
- Forklocks or plastic pegs provide proper socket to PCB alignment, and secure PCB retention during and after soldering
- SMT termination (87966 only) allows for space saving and added freedom in the design of the PCB

Reference Information

Product Specification: PS-87705-002, PS-87746-002 and PS-87966-001

UL File No.: E29179 (87705, 87746)

CSA File No.: LR19980 (87705, 87746)

Mates With: 1.27mm (0.50") thick memory modules

Designed In: Millimeters

Electrical

Voltage: 30V AC (RMS)/DC

Current: 87966—1.0A

87746, 87705—0.5A

Contact Resistance: 30 milliohms max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 87705, 87746—3.0N min.

87966—2.5N min.

Insertion Force to PCB: 87705—66.7N max.

87746—44.4N max. per pin

Mating Force: 87705, 87746—155.9N max.

87966—179.5N max.

Unmating Force: 89N

Durability: 25 cycles

Physical

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

Contact: Copper Alloy

Plating: Contact Area—See table

Solder Tail Area—Tin

Underplating: Nickel

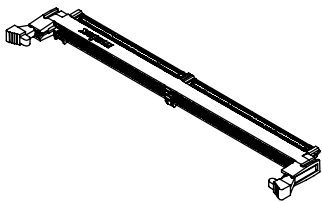
Circuits	Order No.	PCB Mounting	PCB Retention	Plating Thickness	PCB Thickness	Latch Color	Lead-free
240	87705-0021	Through Hole	Forklock	0.38 μ m (15 μ "*)	1.60mm (.063")	Off-white	Yes
	87705-1021			0.38 μ m (15 μ "*)	2.40mm (.094")		
	87705-0051			0.76 μ m (30 μ "*)	1.60mm (.063")		
	87705-1051			0.76 μ m (30 μ "*)	2.40mm (.094")		
	87705-9101			0.76 μ m (30 μ "*)	1.60mm (.063")	Black	
	87746-5211	Press-Fit	Press-fit Metal Pin	0.76 μ m (30 μ "*)	2.40mm (.094")	Clear	
	87746-5311			0.76 μ m (30 μ "*)	1.60mm (.063")		

Circuits	Order No.	PCB Mounting	PCB Retention	Plating Thickness	PCB Thickness	Latch Color	Lead-free		
240	87746-5201	Press-Fit	Press-fit Metal Pin	0.38 μ m (15 μ "*)	2.40mm (.094")	Clear	Yes		
	87746-5301			0.38 μ m (15 μ "*)	1.60mm (.063")				
	87746-8011			0.76 μ m (30 μ "*)	2.40mm (.094")	Off-white			
	87746-9011			0.76 μ m (30 μ "*)	1.60mm (.063")				
	87746-8001			0.38 μ m (15 μ "*)	2.40mm (.094")				
	87746-9001			0.38 μ m (15 μ "*)	1.60mm (.063")				
	87966-0001			SMT	Forklock	0.76 μ m (30 μ "*)		1.60mm (.063")	Black

1.00mm (.039") Pitch DDR2 DIMM Angle Socket

87803

Through Hole, Forklock Version



Features and Benefits

- High-temperature thermoplastic housing withstands lead-free solder processing
- Complies with all JEDEC standards, ensures 100% industry compatibility
- Dual ejector latches for easy module insertion and removal with minimal micro-motion
- Added contact wipe for improved contact reliability between socket and module card
- Forklocks ensure secure PCB retention during and after soldering
- Plastic locating pegs assures proper socket to PCB

Reference Information

Product Specification: PS-87803-003, PS-87919-006 and PS-87916-001

UL File No.: E29179 (87803)

CSA File No.: LR19980 (87803)

Mates With: 1.27mm (0.50") thick memory modules

Designed In: Millimeters

Electrical

Voltage: 30V AC (RMS)/DC

Current: 0.5A

Contact Resistance: 30 milliohms max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 3.0N min.

Insertion Force to PCB: 66.5N max.

Mating Force: 205N max.

Unmating Force: 89N min.

Durability: 25 cycles

Physical

Housing: Black glass-filled LCP, UL 94V-0

Contact: Copper Alloy

Plating: Contact Area—See table

Solder Tail Area—Tin

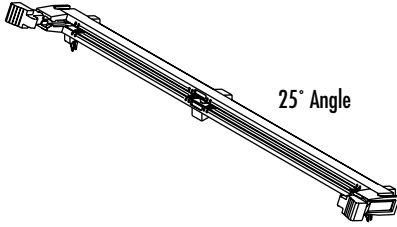
Underplating: Nickel

Circuits	Order No.	Entry	Plating Thickness	Recommended PCB Thickness	Latch Color	Lead-free
240	87803-0002	25° Angle	0.38 μ m (15 μ "*)	1.60mm (.063")	Off-white	Yes
	87803-0012		0.38 μ m (15 μ "*)	2.40mm (.094")		
	87803-0102		0.76 μ m (30 μ "*)	1.60mm (.063")		
	87803-0112		0.76 μ m (30 μ "*)	2.40mm (.094")		

1.27mm (.050") Pitch DDR DIMM Socket

87623/87639

**Low Profile
Single Key, with Forklocks and
Plastic Peg**



Features and Benefits

- Accepts standard JEDEC MO-206 modules
- Dual ejector latches align modules for insertion and provide an audible click when it is in the closed position
- Forklocks provide PCB retention during and after soldering
- Baseplate ensures PC tail true position
- Tight stacking distances of 22.86mm (.900") for typical SOJ package and 13.34mm (.525") for TSOP package
- Several options for keying and solder tail length

Reference Information

Product Specification: PS-87623-002
 Packaging: Tray
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: JEDEC standard 1.27mm (.050") thick PCB module
 Designed In: Millimeters

Electrical

Voltage: 50V
 Current: 1.0A
 Contact Resistance: 40 milliohms max.
 Dielectric Withstanding Voltage: 500V AC
 Insulation Resistance: 1000 Megohms min.

Mechanical

Mating Force: 0.78N (0.175 lb) per contact max.
 Contact Retention to Housing: 3.92N min.
 Durability: 25 cycles max.

Physical

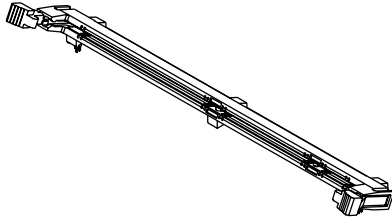
Housing: Black high-temperature thermoplastic, UL 94V-0
 Contact: Copper Alloy
 Plating: Contact Area—Selective Gold (See Table)
 Solder Tail Area—Tin/Lead
 Underplating—Nickel

Circuits	Entry	Order No.		Voltage Key	PC Tail Length	Forklock Length	Peg Length	Lead-free
		0.38 μ m (15 μ in) Gold	0.76 μ m (30 μ in) Gold					
184	25° Reverse Angle	87639-1001	87639-1100	Right (2.5V)	2.79 (.110)	4.83 (.190)	3.94 (.155)	Yes
		87639-1010	87639-1110		3.18 (.125)			
		87639-1011						
	25° Angle	87623-2001	87623-2101	Left (2.5V)	2.79 (.110)	3.18 (.125)	3.18 (.125)	
		87623-2011	87623-2111		3.18 (.125)	3.94 (.155)	4.83 (.190)	
		87623-2012	87623-2115		3.18 (.125)	3.18 (.125)	3.18 (.125)	
		87623-2013	87623-2113		3.18 (.125)	4.42 (.174)	4.83 (.190)	

1.27mm (.050") Pitch DIMM 8-Byte Socket

87587

**168 Circuit, Low Profile (25°)
Multi-Key, with Forklocks and
Plastic Peg**



Features and Benefits

- Accepts Standards JEDEC MO-161 modules
- Dual ejector latches align modules for insertion and provide an audible click when in the closed position
- Forklocks provide PCB retention during and after soldering
- Base-plate ensures PC tail true position
- Tight stacking distances: 22.86mm (.900") for typical SOJ packaging, 13.34mm (.525") for TSOP packaging
- Several options for keying and solder-tail length

Reference Information

Product Specification: PS-87587-007
Packaging: Tray
Mates With: JEDEC standard 1.27mm (.050") thick PCB module
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 1.0A
Contact Resistance: 30 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Mating Force: 0.78N
Contact Retention to Housing: 3.92N min.
Durability: 25 cycles min.

Physical

Housing: Black, high-temperature thermoplastic, UL 94V-0
Contact: Copper Alloy
Plating: Contact—Gold or Gold-compatible over Nickel
Solder Tail—Tin over Nickel

Circuits	Order No.		Function Key	Voltage Key	PC Tail Length	Recommended PCB Thickness	Lead-free
	15 μ m Select Gold	30 μ m Select Gold					
168	87587-2048	87587-2148	Left	Center (3.3V)	2.79 (.110)	2.19 (.086) max.	Yes
	87587-2049	87587-2149	Center				
	87587-2050	87587-2150	Right				
	87587-2057	87587-2157	Left		3.18 (.125)	2.58 (.101) max.	
	87587-2058	87587-2158	Center				
	87587-2059	87587-2159	Right				

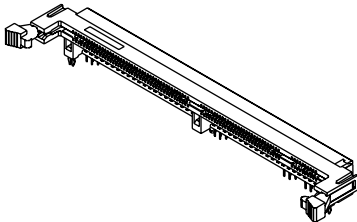
www.molex.com/product/sockets/dimm.html

K

1.27mm (.050") Pitch DIMM 8-Byte Socket

87609/87587

**168 Circuit, Right Angle,
Multi-key, with Forklocks and
Plastic Pegs**



Features and Benefits

- Accepts JEDEC MO-161 modules for 100% industry compatibility
- Dual ejector latches align modules for insertion and ease module removal
- Robust pre-loaded contacts improved reliability
- Optional voltage and function keying

Reference Information

Product Specification: PS-87609-002
Packaging: Tray
Mates With: JEDEC standard 1.27mm (.050") thick PCB modules
Designed In: Millimeters

Electrical

Voltage: 125V AC
Current: 1.0A
Contact Resistance: 30 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 3.92N (.88 lb) min.
Mating Force: 147.10N (33.07 lb) max.
Durability: 25 cycles max.

Physical

Housing: Black high-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—See table
Solder Tail Area—1.91 μ m (75 μ) Tin
Underplating—Nickel

Circuits	Entry	Order No.		Function Key	Voltage Key	PC Tail Length	Latch Color	Lead-free
		0.38 μ m (15 μ) Gold	0.76 μ m (30 μ) Gold					
168	25° Angle	87587-2048	87587-2148	Left	Center (3.3V)	2.79 (.110)	Beige	Yes
		87587-2057	87587-2157			3.18 (.125)		
		87587-2049	87587-2149	Center		2.79 (.110)		
		87587-2058	87587-2158			3.18 (.125)		
		87587-2050	87587-2150	Right		2.79 (.110)		
		87587-2059	87587-2159			3.18 (.125)		
	Right Angle Side Entry	87609-0051		Left	Center (3.3V)	2.79 (.110)	Beige	Yes
		87609-0052		Center				
		87609-0053		Right				
		87609-0060		Left				
		87609-0061		Center				
		87609-0062		Right				
		87609-0069		Left				
		87609-0070		Center				
87609-0071		Right	3.56 (.140)					