

Amphenol MIL-DTL-38999, Series III, TV



**New
Featured**



Other New 38999

Dualok™
see page 55

HD38999
see page 46



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MIL-DTL-38999, Series III TV

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MIL-DTL-38999 Series III Typical Markets:

- Military & Commercial Aviation
- Military Vehicles
- Missiles & Ordnance
- C4ISR
- Space Applications

Amphenol
Aerospace

38999	Series	Series	Series	Military	MIL-DTL-27599 JT/LJT Solder		Hermetics					Contact Size											
	JT II	LJT I	TV III	III		Crimp	Class H	Class Y	TV*	Service Rating	Total Contacts	23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax)	
III			7-D2							M	2		2										
HD			7-D3							M	3		3										
Dualok			7-D4							M	4		4										
II	8-2■				P					M	2					2							
I	8-3■				X	NA	P	P		M	3					3							
	9-3■				X																		
SJT		9-5★■								Grounded	1											1	
Accessories	8-6				X	X	P	P		M	6			6									
Aquacon	9-6				X	X	P	P		M	7			7									
Herm/Seal	9-7■		9-9■		X					N	9	9											
PCB	9-22■				X					I	2					2							
	8-35					X	P	P		M	6		6										
	9-35	9-35	A35			X	P	P	P	M	4				4								
	8-44					X	P	P															
HIGH SPEED	9-44					X				M	2												
		9-94■				◆				M	4					2							
Fiber Optics	8-97■				X					M	4			2		2							
	8-98				S	X	P	P		I	3					3							
	9-98	9-98	A98		X	X	P	P	P	I	2					3							
	11-2★	11-2★	B2		X	X	P**																
Contacts Connectors Cables	10-4					3				I	4					4							
	11-4	11-4			X	S/2																	
	10-5				X	X	P	P		I	5					5							
	11-5	11-5	B5		X	X		P															
	11-6■				S					I	6					6							
	10-13				X	X	P/S	P/S															
EMI Filter Transient	11-13				X	X	P/S	P/S		M	13			13									
		11-19■								N	19	19											
	10-35					X	P/S	P/S		M	13		13										
	11-35	11-35	B35		X	P/S	P/S	P															
26482 Matrix 2		11-54■				X	◆			II	4		4										
	10-98				X	X	P/S	P/S		I	6					6							
11-98	11-98	B98		X	X	P/S	P/S	P															
	10-99				X	P	P			I	7					7							
	11-99	11-99	B99		P	X		P															
83723 III Matrix Pyle	12-3				X	X	◆	P	P	II	3						3						
	13-3■					P																	
	12-4				X	X	P	P		I	4						4						
	13-4★	13-4★	C4		X	X	P	P	P														
	12-8				X	X	P	P		I	8					8							
	13-8	13-8	C8		X	X	P	P	P														
26500 Pyle		13-13■								I, Fiber Optic	4						2**	2					
	12-22				X	P/S	P/S																
	13-22				X	X	P/S	P/S		M	22			22									
		13-26■				2				M	8		2					6					
		13-32■								N	32	32											
	12-35				X	P/S	P/S			M	22		22										
13-35	13-35	C35		X	P/S	P/S	P																
5015 Crimp Rear Release Matrix		13-63■				◆				I	4						2	2					
	12-98				X	X	P/S	P/S		I	10					10							
13-98	13-98	C98		X	X	P/S	P/S	P															
22992 Class I	14-4■					2				I	4							4					
	15-4■	15-4■			2	◆																	
	14-5				X	X	P	P		II	5						5						
	15-5★	15-5★	D5		X	X	P	P	P														

- X Completely tooled.
 • Majority of tooling is completed (contact Amphenol Aerospace for availability).
 ◆ Not tooled for 02-R.
 P Available with Pin contacts only
 S Available with Socket contacts only
 P/S Available with Pin contacts or Socket contacts
 ★ Ground plane proprietary option available. Arrg. 9-5 is exclusively ground plane type.
 ■ Not Mil-Qualified.
 ◆ 21-75 is Mil-Qualified with twinax contacts only.
 Note: MS connector 21-75 is supplied with size 8 twinax.
 Commercial connector 21-75 is supplied with size 8 coax.

- HD designates High Density 38999 Series III insert patterns which use size 23 contacts only. Not rated over 175°C.
 * Hermetic inserts - solder termination standard. (Contact Amphenol Aerospace for optional PCB or eyelet termination).
 ** Two size 16 contacts dedicated to fiber optics. See the Fiber Optic section for more information.
 *** For use in MIL-STD-1760 applications (see pages 43 & 44).
 † For RG 180/U and RG 195/U cables only.
 †† Size 8 Coax and Twinax are interchangeable.
 (2) Not Tooled for RP or 02RE
 (3) Pin inserts only, not tooled for RP or 02RE (Consult Amphenol Aerospace for avail.)
 (5) MS Connector 21-79 has provision for two size 8 coax contacts. Coax contacts are not supplied unless specified by customer.

MIL-DTL-38999, Series I LJT, II JT, III TV, HD

Insert Availability and Identification Chart

Series	Series	Series	Military	MIL-DTL-27599 JT/LJT Solder	Crimp	Class H	Class Y	TV*	Service Rating	Total Contacts	23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8++ (Twinax)
JT II	LJT I	TV III	III																		
14-15				X	X	P	P		I	15					14	1					
	15-15	15-15	D15	X	X	P/S	P/S	P	I	15					14	1					
14-18				X	X	P/S	P/S														
	15-18	15-18	D18	X	X	P/S	P/S	P	I	18					18						
14-19■				X	X																
	15-19	15-19	D19		X	P	P	P	I	19					19						
14-35					X	P	P														
	15-35	15-35	D35		X	P/S	P/S	P	M	37		37									
14-37				X	X	P	P		M	37			37								
	15-37			X	X	P	P														
		15-55■							N	55	55										
14-68■					2	P	P		1	8						8					
	15-68■			X	3																
14-97■					X	P	P		I	12					8	4					
	15-97	15-97	D97	X	X	P	P	P													
	17-2	17-2	E2		X	+			M	39		38									1
16-6					X	P	P		I	6							6				
	17-6	17-6	E6		X	P	P	P													
16-8				X	X	P	P														
	17-8★	17-8★	E8	X	X	P/S	P/S	P	II	8					8						
16-13■					2				I	13					13						
	17-13■				2																
	17-22■	17-22★■			+				Coax	4							2		2		
	17-25■				2				M	24		22							2		
16-26				X	X	P/S	P/S		I	26					26						
	17-26	17-26	E26	X	X	P/S	P/S	P													
16-35					X	P	P		M	55		55									
	17-35	17-35	E35	X	X	P	P	P													
16-42					X				M	42				42							
	17-42■				P																
		17-52■			X	+			M	2											2
16-55				X	X	P/S	P/S		M	55			55								
	17-55			X	X	P/S	P/S														
		17-60■			X				I/Coax	10		8							2		
		17-73■							N	73	73										
16-99				X	X	P	P		I	23					21	2					
	17-99	17-99	E99	X	X	P	P														
		19-AD■			X	+			Inst.	17					16						1
18-11				X	X	P	P		II	11						11					
	19-11★	19-11★	F11	X	X	P	P	P													
	19-18	19-18	F18		2	2			M	18		14									4
18-28				X	X				I	28					26	2					
	19-28■	19-28	F28	X	P	X															
18-30				X	X				I	30					29	1					
	19-30■			X	P																
		19-31■			X				M	15		12					1			2	
18-32				X	X	P/S	P/S		I	32					32						
	19-32	19-32	F32	X	X	P/S	P/S	P													
18-35					X	P	P		M	66		66									
	19-35	19-35	F35		X	P	P	P													
18-53				X	X				M	53			53								
	19-53■				P																
18-66				X	X	P	P		M	66			66								
	19-66				X	P	P														
	19-67■			X	3	S	S		M	67			67								
18-68■					2																
	19-68■	19-68			3	S			I	18					18						
18-96■					2				I	9						9					
		19-88■							N	88	88										
20-1					X	P	P		M	79			79								
	21-1				X	P/S	P/S														

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

**HIGH
SPEED**

Fiber
Optics

Contacts
Connectors
Cables

EMI Filter
Transient

26482
Matrix 2

83723 III
Matrix | Pyle

26500
Pyle

5015
Crimp Rear
Release
Matrix

22992
Class I

Back-
Shells

Options
Others

38999	Series	Series	Series	Military	MIL-DTL-27599 JT/LJT Solder	Crimp	Hermetics			Service Rating	Total Contacts	Contact Size										
III	JT II	LJT I	TV III	III			H	Y	TV*			23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax)
HD	20-2					X			M	65					65							
Dualok		21-2■				X																
II	20-11■					3			I	11								11				
I		21-11★	21-11★	G11		X																
SJT	20-16				X	X	P/S	P/S		II	16						16					
Accessories		21-16★	21-16★	G16	X	X	P	P	P													
Aquacon		21-25■								I	25					25						
Herm/Seal		21-27■			X					I	27					27						
PCB			21-29■			X				I	27					19	4	4				
HIGH SPEED	20-35					X	P	P		M	79		79									
		21-35	21-35	G35		X	P/S	P/S	P													
	20-39				X	X	P	P		I	39					37	2					
		21-39	21-39	G39	X	X	P	P	P													
	20-41				X	X	P	P		I	41					41						
Fiber Optics		21-41	21-41	G41	X	X	P/S	P/S	P													
		21-75★	21-75★◇	G75		2	X			N	M	4								4	(4)	
		21-79■	21-79■			2	X			II	19		17						2	(5)		
			21-121■							N	121	121										
	22-1					X	P/S	P/S		M	100			100								
Contacts Connectors Cables		23-1				X	P	P														
	22-2				X	X	P	P		M	85				85							
		23-2			X	X	P	P														
		23-6★■	23-6★■			P				M	6											6
	22-14■					2	◆			I	14							14				
EMI Filter Transient		23-14■	23-14■			2	◆															
	22-21				X	X	P	P		II	21						21					
		23-21★	23-21★	H21	X	X	P	P	P													
	22-32				X	X	P	P		I	32					32						
		23-32■			X	P																
26482 Matrix 2		23-34■			X					I	34					34						
	22-35					X	P/S	P/S		M	100		100									
		23-35	23-35	H35		X	P	P	P													
	22-53■					P				I	53					53						
		23-53	23-53	H53	X	X	P/S	P/S	P													
83723 III Matrix Pyle			23-54 ■			X				M	53		40				9	4				
	22-55				X	X	P	P		I	55					55						
		23-55	23-55	H55		X			P													
		23-97■			X					II	16					16						
		23-99■			X					II	11					11						
26500 Pyle			23-151 ■							N	151	151										
	24-1					X	P	P		M	128			128								
		25-1				X	P	P														
	24-2					X				M	100				100							
		25-2				X																
5015 Crimp Rear Release Matrix	24-4					X	P	P		I	56					48	8					
		25-4	25-4	J4		X			P													
		25-7■	25-7	J7		X				M Twinax	99		97							2		
			25-8★	J8		◆				Twinax	8											8
			25-11***	J11		2	◆			N	11					2				9		
22992 Class 1			25-17■			◆				M	42		36									6
	24-19■					X	P	P		I	19							19				
		25-19★	25-19★	J19		X			P													
		25-20■	25-20***	J20		2	◆			N	30					10	13	4				3

X Completely tooled.

- Majority of tooling is completed (contact Amphenol Aerospace for availability).

◆ Not tooled for 02-R.

P Available with Pin contacts only

S Available with Socket contacts only

P/S Available with Pin contacts or Socket contacts

★ Ground plane proprietary option available. Arrg. 9-5, 26-62 is exclusively ground plane type.

■ Not Mil-Qualified.

◇ 21-75 is Mil-Qualified with twinax contacts only.

* Hermetic inserts - solder termination standard. (Contact Amphenol Aerospace for optional PCB or eyelet termination).

■ HD designates High Density 38999 Series III insert patterns which use size 23 contacts only. Not rated over 175°C.

** Two size 16 contacts dedicated to fiber optics. See the Fiber Optic Section for more information.

*** For use in MIL-STD-1760 applications (see pages 43 & 44).

† For RG 180/U and RG 195/U cables only.

†† Size 8 Coax and Twinax are interchangeable.

(2) Not Tooled for RP or 02RE

(3) Pin inserts only, not tooled for RP or 02RE (Consult Amphenol for avail.)

(4) MS connector 21-75 is supplied with size 8 twinax. Commercial connector 21-75 is supplied with size 8 coax.

(5) MS Connector 21-79 has provision for two size 8 coax contacts. Coax contacts are not supplied unless specified by customer.