

- ✓ High-data-rate transfer, ideal for eDP HBR2 (5.4 Gbps/lane).
- ✓ Simultaneous soldering of different size cables for micro-coaxial and discrete wire.
- ✓ Click sensation provides audible and tactile check for proper mating.

Pin counts:

Range	30 – 50
Available	30, 40, 50

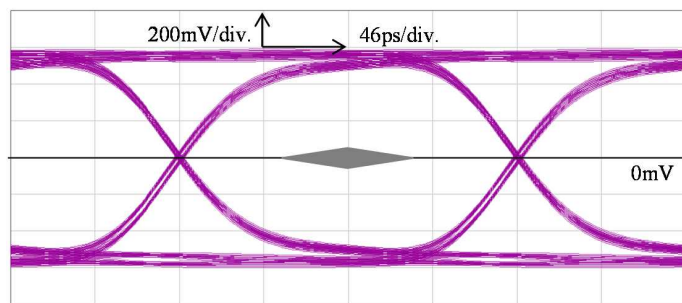
*Please inquire for pin counts not listed or outside of the pin count range.

Mating Type	Right angle vertical	
Wire Pitch (mm)	0.5	
Board Pitch (mm)	0.5	
Mated Size (mm)	Height	4.3+/- 0.2
	Width Formula	5.0 + (0.5*p)
	Depth	7.8
Wiping Length (mm)		0.90
Applicable Wire (AWG#) (*)	Micro-coaxial for Signals (**)	45Ω : #36 or smaller
		50Ω : #38 or smaller
	Twin-coaxial	#40
	Discrete	#32 or smaller
	Compatibility	-
Performance (Reference Only)		eDP HBR 2 (5.4 Gbps) USB® 3.0 Gen 1 (5 Gbps)

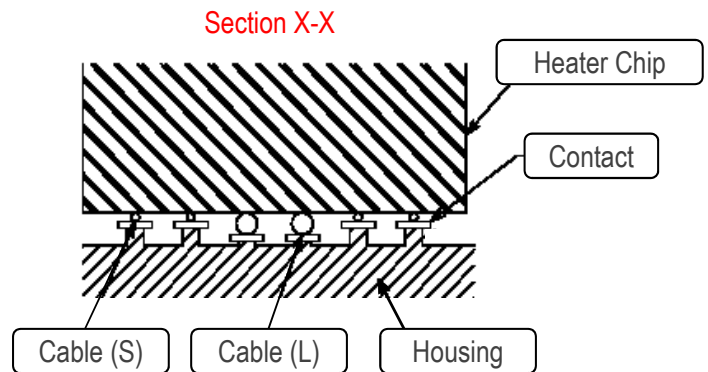
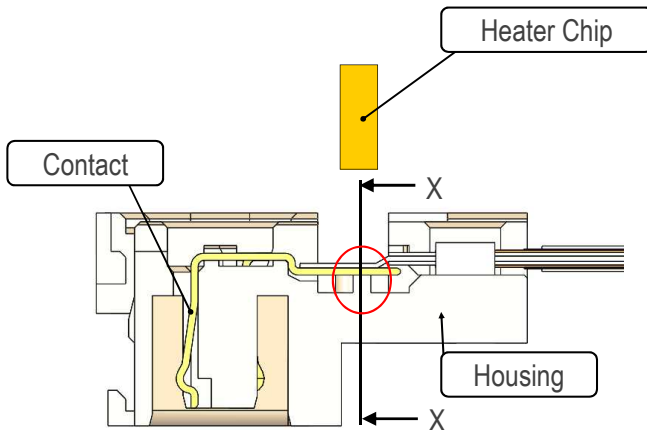
High-Data-Rate Transfer, Ideal for eDP HBR2 (5.4 Gbps/Lane)

Eye pattern (Differential)
Bit rate : 5.4 Gbps
Rise time : 60ps (10-90%)
Input voltage : 1.2Vp-p

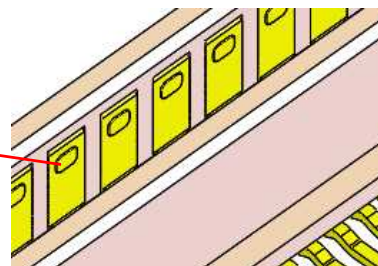
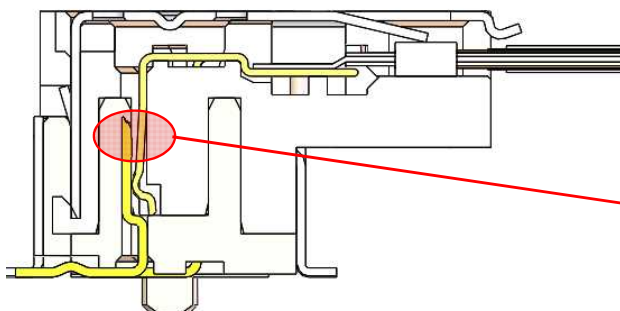
*Please contact I-PEX Connectors for more test details.



Simultaneous Soldering of Different Size Cables for Micro-coaxial and Discrete Wire



Click Sensation Provides Audible and Tactile Check for Proper Mating

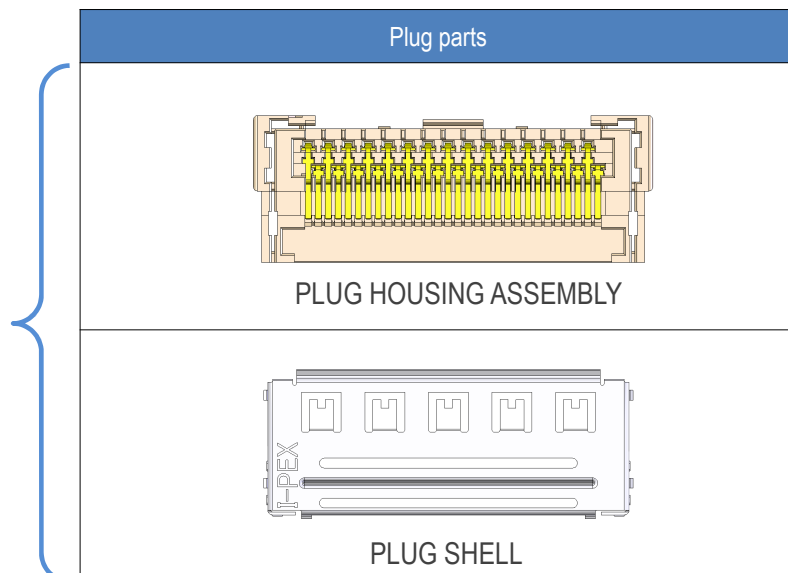
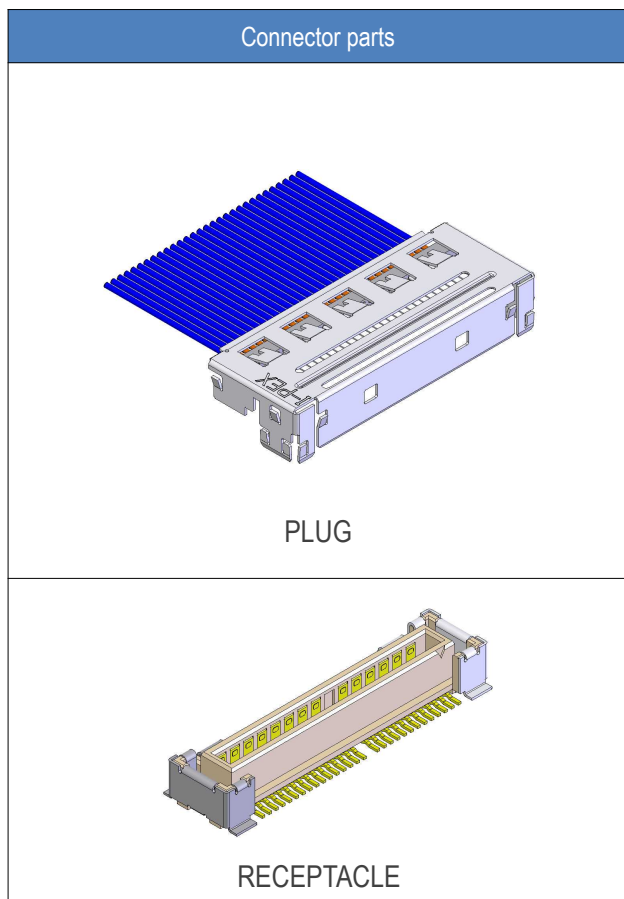


Receptacle Contact Dimple

FPL[®]

Component Parts Detail

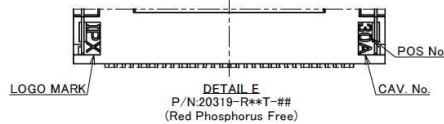
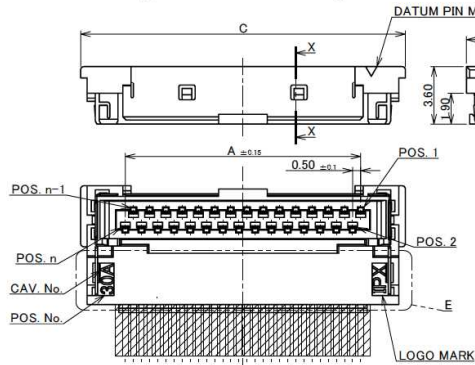
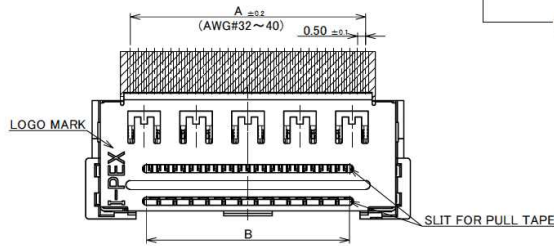
Component Parts:



Plug for Cable Assembly :

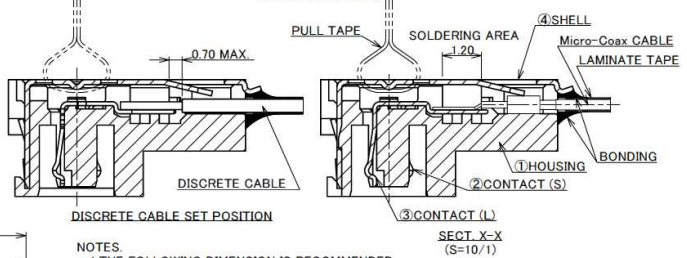
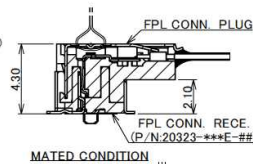
Recommended P/N	20319-R**T-11 (30P/40P)	20319-0**T-11 (50P)
PART NO.	Pos.	A B C PULL TAPE WIDTH
20319-R30T-11	30	14.5 12.5 20.0 12.0
20319-R40T-11	40	19.5 12.5 25.0 12.0
20319-R50T-11	50	24.5 19.5 30.0 19.0

◆ MARK MEANS NOT AVAILABLE.

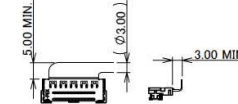


DETAIL
P/N:20319-R**T-11
(Red Phosphorus Free)

P/N : 20319-#**T-11
1 : Expect for W-Point C/T Ver. (HSG: BEIGE)
2 : W-Point C/T Ver. (HSG: BLACK)
SEE TABLE.1
Pos.
0 : Expect for Red Phosphorus Free
R : Red Phosphorus Free (SEE DETAIL E)



NOTES.
1. THE FOLLOWING DIMENSION IS RECOMMENDED WHEN THE CABLE IS BENT.



PART NO.	Pos.	A B C PULL TAPE WIDTH
20319-R30T-11	30	14.5 12.5 20.0 12.0
20319-R40T-11	40	19.5 12.5 25.0 12.0
20319-R50T-11	50	24.5 19.5 30.0 19.0

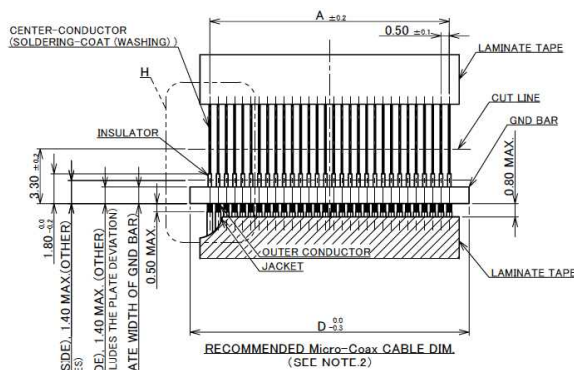
TABLE.1

PART NO.	CONTACT FINISH (MATING SIDE)	CONTACT FINISH (CABLE SIDE)
20319-#**T-11	Au 0.2 μm MIN. OVER Ni 1.00 μm MIN.	Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
20319-#**T-41	Au 0.3 μm MIN. OVER Ni 1.00 μm MIN.	Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.

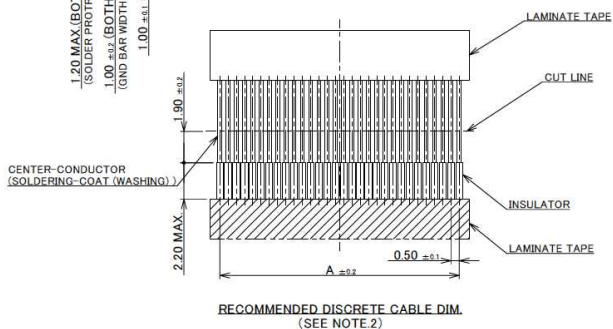
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL	PHOSPHOR BRONZE	Sn-Cu 2.00 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT (L)	PHOSPHOR BRONZE	SEE ABOVE TABLE.1
2	CONTACT (S)	PHOSPHOR BRONZE	SEE ABOVE TABLE.1
1	HOUSING	LCP	UL94V-0

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PART NO.	Pos.	A B C D
20319-R30T-11	30	14.5 12.5 20.0 12.0
20319-R40T-11	40	19.5 12.5 25.0 12.0
20319-R50T-11	50	24.5 19.5 30.0 19.0

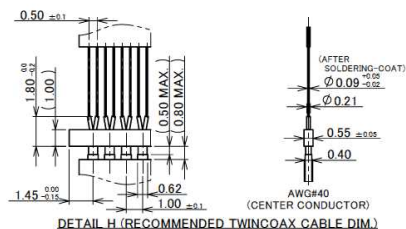


RECOMMENDED Micro-Coax CABLE DIM.
(SEE NOTE.2)

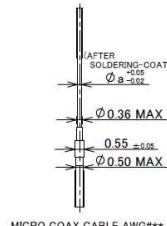


RECOMMENDED DISCRETE CABLE DIM.
(SEE NOTE.2)

NOTES.
2. DIFFERENTIAL IMPEDANCE : 100 Ω

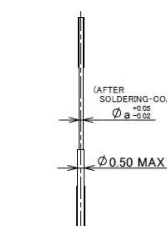


DETAIL H (RECOMMENDED TWINCOAX CABLE DIM.)



MICRO COAX CABLE AWG#**

AWG#	a
#32	0.24
#34	0.192
#36	0.15
#40	0.09



DISCRETE CABLE AWG#**

AWG#	a
#32	0.24
#36	0.15

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Plug Housing Assembly :

Recommended P/N		20320-R**T-11 (30P/40P)			20320-0**T-11 (50P)		
-----------------	--	-------------------------	--	--	---------------------	--	--

PART NO.	Pos.	A	B	C
20320-#30T-#	30	17.1	14.5	20.0
20320-#40T-#	40	22.1	19.5	25.0
20320-050T-#	50	27.1	24.5	30.0

◆ MARK MEANS NOT AVAILABLE.

P/N : 20320-#**T-#

1 : Except for W-Point C/T Ver. (HSG. BEIGE)
2 : W-Point C/T Ver. (HSG. BLACK)

SEE TABLE I

Pos.

0 : Except for Red Phosphorus Free
R : Red Phosphorus Free (SEE DETAIL E)

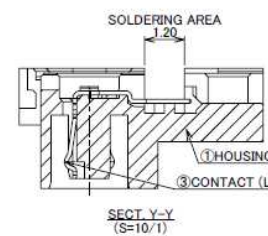
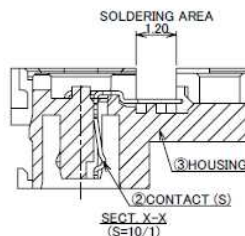
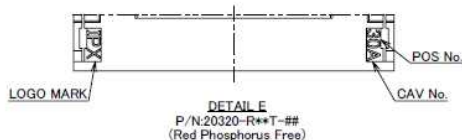
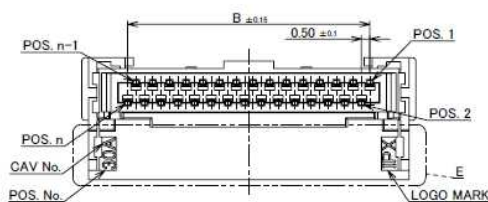
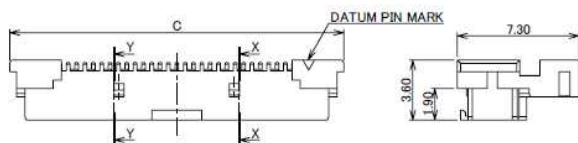
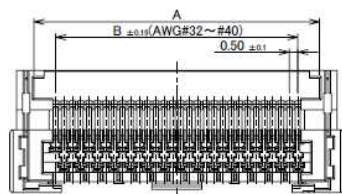
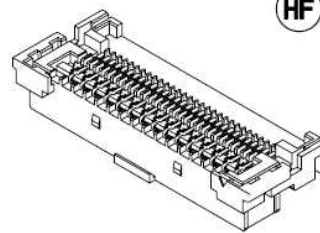


TABLE I.

PART NO.		CONTACT FINISH (MATING SIDE)	CONTACT FINISH (CABLE SIDE)
20320-***T-1*		Au 0.2 μ m MIN. OVER Ni 1.00 μ m MIN.	Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.
20320-***T-4*		Au 0.3 μ m MIN. OVER Ni 1.00 μ m MIN.	

3	CONTACT (L)	PHOSPHOR BRONZE	SEE ABOVE TABLE 1
2	CONTACT (S)	PHOSPHOR BRONZE	SEE ABOVE TABLE 1
1	HOUSING	LCP	UL94V-0

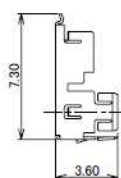
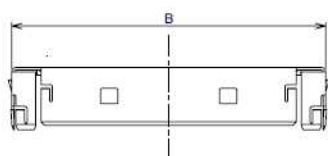
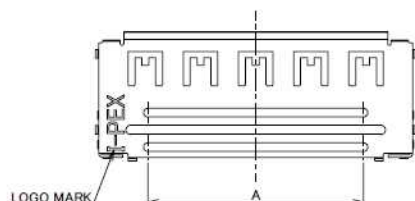
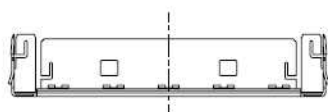
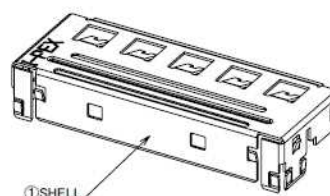
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
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Plug Shell-A :

Recommended P/N		1968-0**2	
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PART NO.	Pos.	A	B
1968-0302	30	12.5	18.2
1968-0402	40	12.5	23.2
1968-0502	50	19.5	28.2



1	SHELL	PHOSPHOR BRONZE	Sn-Cu 2.00 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH . REMARKS

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Receptacle Assembly :

Recommended P/N	20323-R**E-12 (30P/40P)	20323-0**E-12 (50P)
-----------------	-------------------------	---------------------

PART NO.	Pos.	A	B	C
20323-30E-***	30	14.5	19.4	16.25
20323-40E-***	40	19.5	24.4	21.25
20323-050E-***	50	24.5	29.4	26.25

◆ MARK MEANS NOT AVAILABLE.

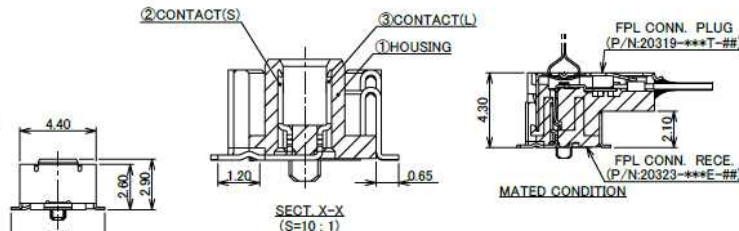
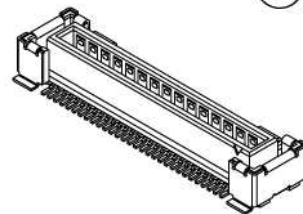
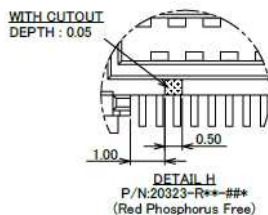
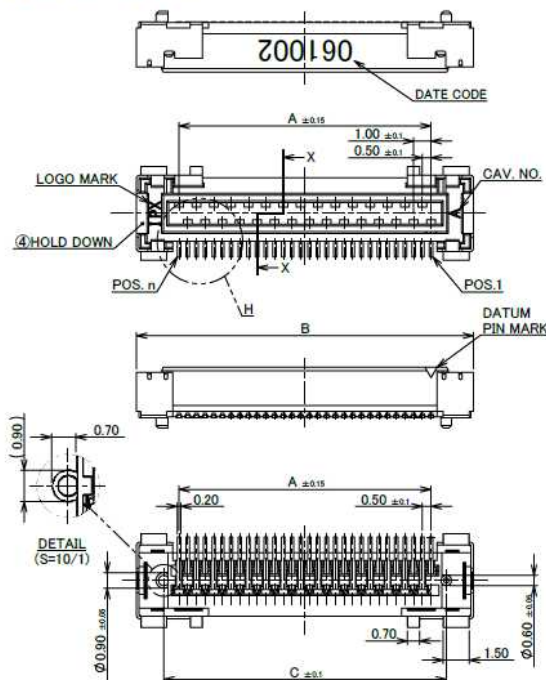


TABLE 1

PART NO.	C/T FINISH (MATING SIDE)	C/T FINISH (TAIL SIDE)
20323-***E-1**	Au 0.2 μm MIN. OVER Ni 1.00 μm MIN.	Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
20323-***E-4**	Au 0.3 μm MIN. OVER Ni 1.00 μm MIN.	

NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	HOLD DOWN	BRASS	Sn-Cu 1.0 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT (L)	BRASS	SEE ABOVE TABLE.1
2	CONTACT (S)	BRASS	SEE ABOVE TABLE.1
1	HOUSING	LCP	UL94V-0, BEIGE

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PART NO.	Pos.	D
20323-30E-##W	30	13.00
20323-40E-##W	40	18.00

20323-***E-***

HOUSING MATERIAL TYPE No.
20323-0**E-## ...LCP
20323-R**E-## ...LCP (Red Phosphorus Free)
(SEE DETAIL H)

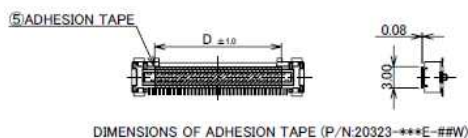
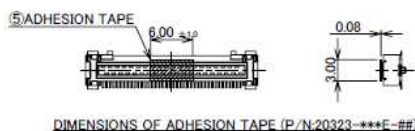
DATE CODE No.
20323-***E-## ...WITHOUT DATE CODE
20323-***ED## ...WITH DATE CODE

POS. NO.

SEE TABLE.1

ADHESION TAPE No.
20323-***E-## ...WITHOUT MARK : ADHESION TAPE LENGTH = 6.0±1.0
20323-***E-##W ...W MARK : ADHESION TAPE LENGTH = D±1.0
20323-***E-##N ...N MARK : NOTHING ADHESION TAPE

BOSS No.
20323-***E-#1 ...WITH BOSS
20323-***E-#2 ...WITHOUT BOSS



NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
5	ADHESION TAPE	PI	-

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ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO COAX : AWG# 40, 38, 36, 34, 32 DISCRETE : AWG# 36, 32 TWINCOAX : AWG# 40
RATING VOLTAGE	100V AC (PER A CONTACT)
RATING AMPERAGE (FOR CONTACT)	0.3A AC/DC [AWG#40] 0.6A AC/DC [AWG#38] 0.8A AC/DC [AWG#36] 1.0A AC/DC [AWG#28~34]
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	20~85% (NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 65mohm MAX.(AWG#28) / AFTER TEST : \angle 140mohm MAX. 110mohm MAX.(AWG#32) 235mohm MAX.(AWG#36) 560mohm MAX.(AWG#40)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \angle 140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	30P : 50.0N MAX. 40P : 60.0N MAX. 50P : 70.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 5.0N MIN. 40P : 6.0N MIN. 50P : 7.0N MIN.
CABLE RETENTION FORCE	30, 40, 50P : 30.0N MIN.
PRODUCT SPECIFICATION	PRS-1198
TEST REPORT	TR-03009
INSTRUCTION MANUAL	HIM-06003
ASSEMBLY MANUAL	ASM-02004

Rev.10



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