

# CABLINE® V

Narrow depth & width with friction lock, USB 3.1 (5 Gbps/lane), Durable to contamination, 0.4 mm pitch, Horizontal mating type micro-coaxial connector

## Product Specifications:

Mating type		Horizontal
Board Pitch (mm)		0.4
Wiping Length (mm)		0.71
Mated size (mm)	Height	1.0 +/- 0.15
	Width	Formula: 4.8 + (0.4*?p)
	Depth	5.65
Pin Counts	Range	Up to 40
	Available	10, 15, 20, 25, 30, 35, 40

## Applicable Cable Size:

Maximum O.D. (mm)	0.4
Micro-Coaxial for Signal (AWG)	45 ohm: #38 or smaller 50 ohm: #40 or smaller
Twin Coaxial (AWG)	#40
Discrete (AWG)	#36 or smaller

## Applicable Standards (Reference Only):

USB 3.1 Gen 1 (5 Gbps) V-By-One HS 1.4 (4 Gbps)
eDP (2.7 Gbps) MiPI standards

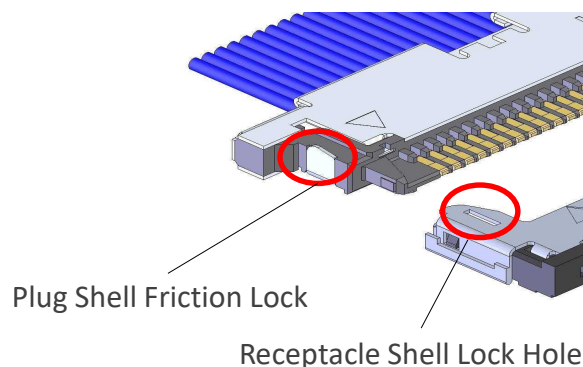
\* Please inquire for pin counts not listed or outside of the pin count range.



## ► Narrow depth & width with friction lock

Width (mm)	$4.8 + (0.4 * ?p)$
Depth (mm)	5.65

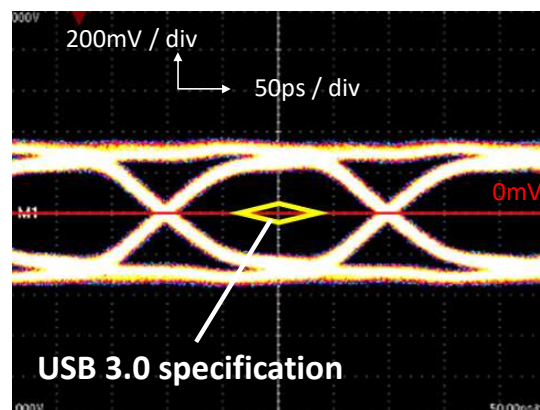
CABLINE V 35p Retention Force	
With Friction Lock Type	12N
Without Friction Lock Type	8N



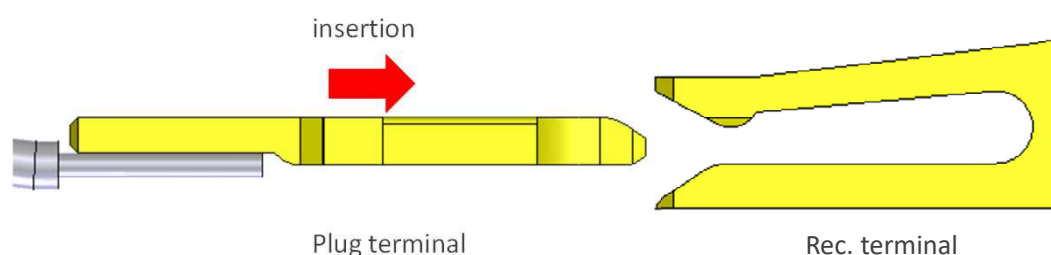
## ► High-data-rate transfer, ideal for USB 3.1 (5 Gbps/lane) applications

Eye pattern (Differential)  
Bit rate : 5 Gbps  
Rise time : 60ps (10-90%)  
Input voltage : 800mVp-p

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



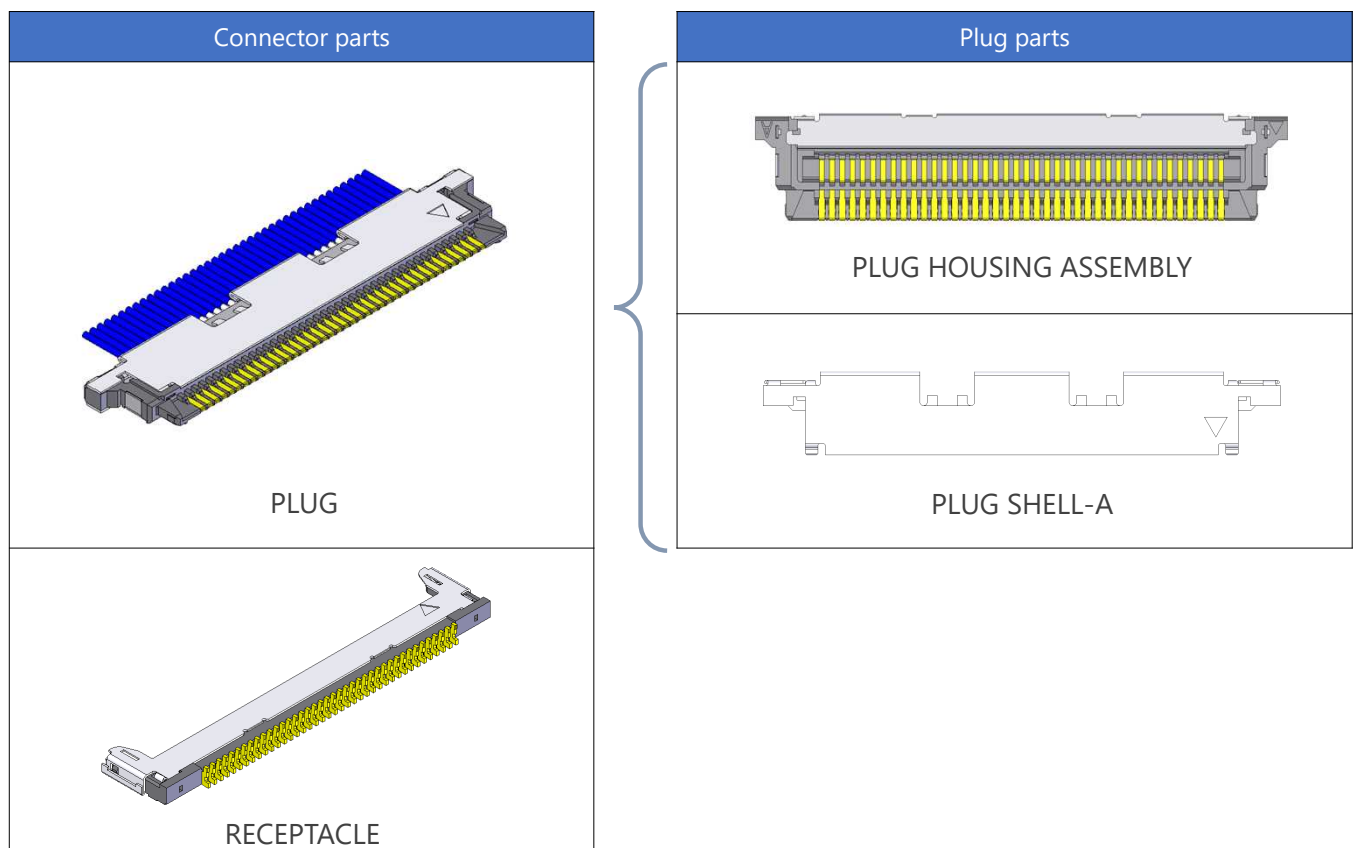
## ► Tuning fork design terminal, excellent wiping power and durable to contamination



Contamination would be wiped off during insertion

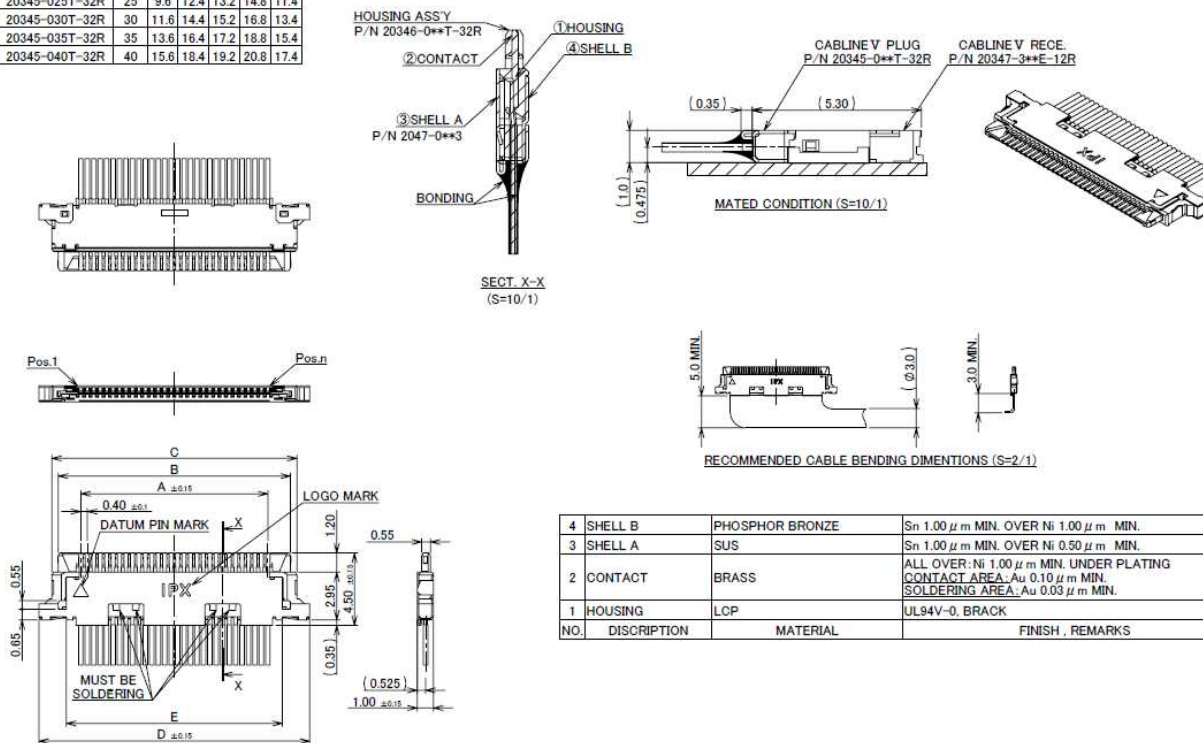
# Component Parts Details

## Component Parts



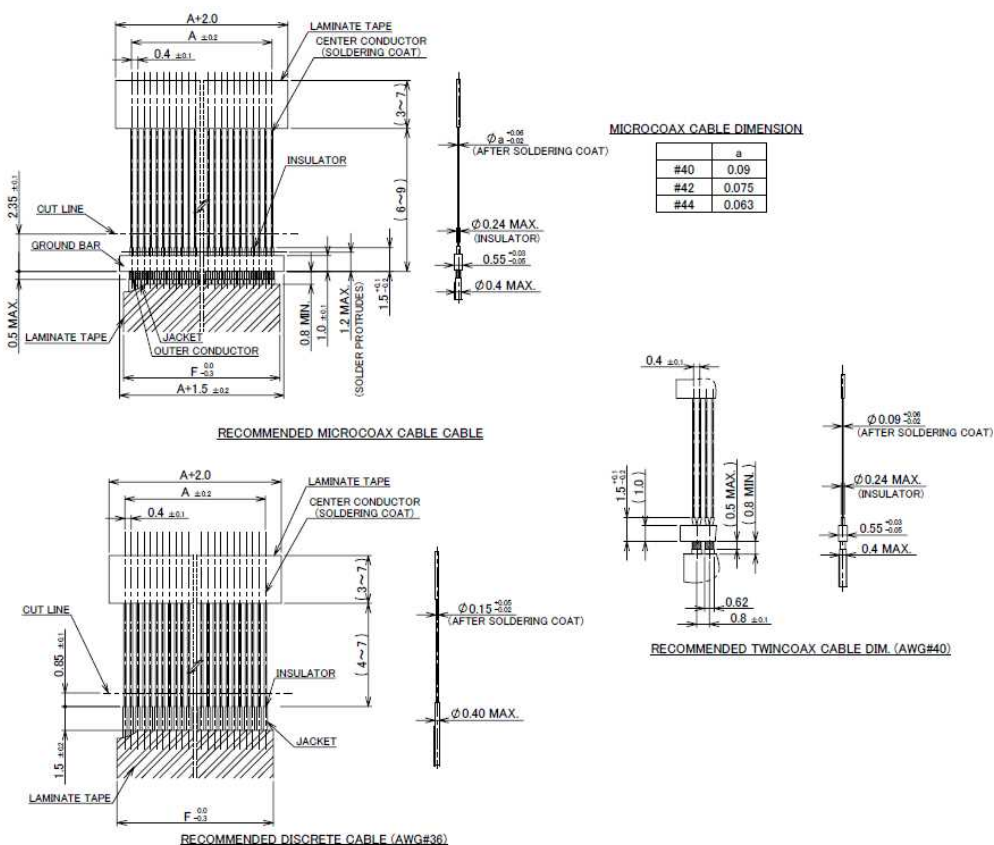
## Plug for Cable Assembly

Recommended P/N		20345-0**T-32R				
PART NO.	POS.	A	B	C	D	E
20345-010T-32R	10	3.6	6.4	7.2	8.8	5.4
20345-015T-32R	15	5.6	8.4	9.2	10.8	7.4
20345-020T-32R	20	7.6	10.4	11.2	12.8	9.4
20345-025T-32R	25	9.6	12.4	13.2	14.8	11.4
20345-030T-32R	30	11.6	14.4	15.2	16.8	13.4
20345-035T-32R	35	13.6	16.4	17.2	18.8	15.4
20345-040T-32R	40	15.6	18.4	19.2	20.8	17.4



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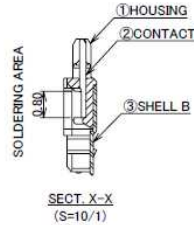
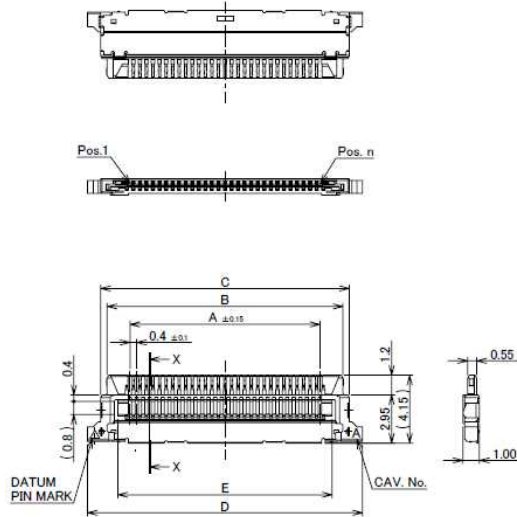
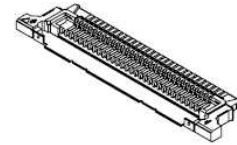
PART NO.	POS.	A	F
20345-010T-32R	10	3.6	4.6
20345-015T-32R	15	5.6	6.6
20345-020T-32R	20	7.6	8.6
20345-025T-32R	25	9.6	10.6
20345-030T-32R	30	11.6	12.6
20345-035T-32R	35	13.6	14.6
20345-040T-32R	40	15.6	16.6



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## Plug Housing Assembly

Recommended P/N		20346-0**T-32R				
PART NO.	POS.	A	B	C	D	E
20346-010T-32R	10	3.6	6.4	7.2	8.8	5.1
20346-015T-32R	15	5.6	8.4	9.2	10.8	7.1
20346-020T-32R	20	7.6	10.4	11.2	12.8	9.1
20346-025T-32R	25	9.6	12.4	13.2	14.8	11.1
20346-030T-32R	30	11.6	14.4	15.2	16.8	13.1
20346-035T-32R	35	13.6	16.4	17.2	18.8	15.1
20346-040T-32R	40	15.6	18.4	19.2	20.8	17.1

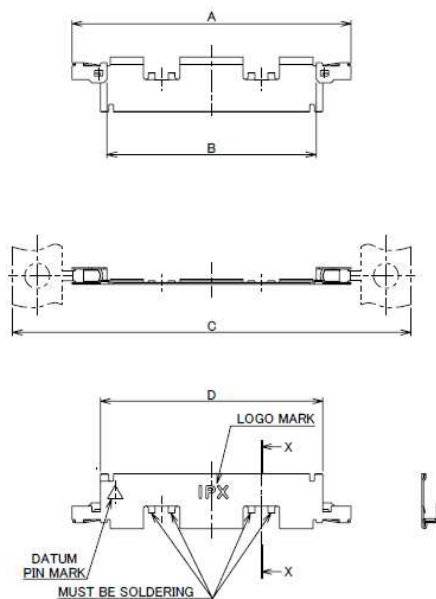
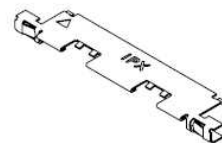


3	SHELL B	PHOSPHOR BRONZE	Sn 1.00 $\mu$ m OVER Ni 1.00 $\mu$ m MIN.
2	CONTACT	BRASS	ALL OVER: Ni 1.00 $\mu$ m MIN. UNDER PLATING CONTACT AREA: Au 0.10 $\mu$ m MIN. SOLDERING AREA: Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BRACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

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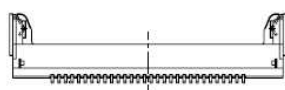
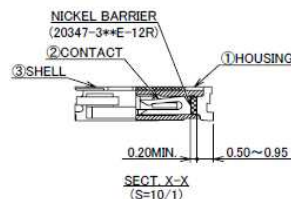
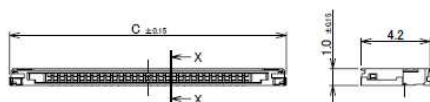
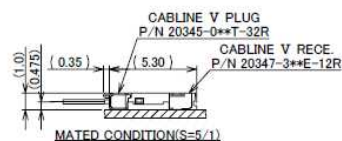
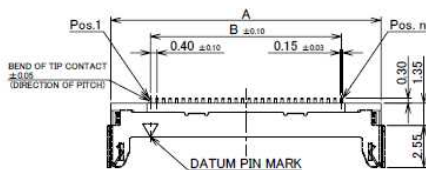
## Plug Shell-A

Recommended P/N		2047-0**3			
PART NO.	A	B	C	D	
2047-0103	8.8	4.6	19.5	5.4	
2047-0153	10.8	6.6	19.5	7.4	
2047-0203	12.8	8.6	19.5	9.4	
2047-0253	14.8	10.6	27.5	11.4	
2047-0303	16.8	12.6	27.5	13.4	
2047-0353	18.8	14.6	27.5	15.4	
2047-0403	20.8	16.6	27.5	17.4	

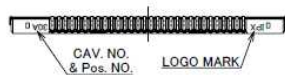


# Receptacle Assembly

Recommended P/N		20347-3**E-12R		
PART NO.	POS.	A	B	C
20347-310E-12R	10	8.40	3.60	8.80
20347-315E-12R	15	10.40	5.60	10.80
20347-320E-12R	20	12.40	7.60	12.80
20347-325E-12R	25	14.40	9.60	14.80
20347-330E-12R	30	16.40	11.60	16.80
20347-335E-12R	35	18.40	13.60	18.80
20347-340E-12R	40	20.40	15.60	20.80

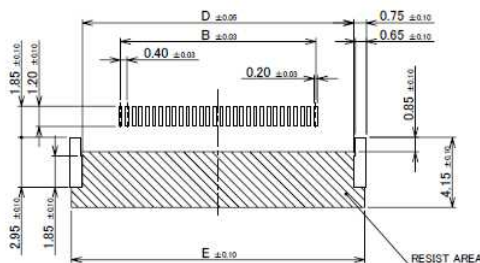


3	SHELL	PHOSPHOR BRONZE	Sn 1.00 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER: Ni 1.00 $\mu$ m MIN. UNDER PLATING CONTACT AREA: Au 0.10 $\mu$ m MIN. SOLDERING AREA: Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BRACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS



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PART NO.	POS.	B	D	E
20347-310E-12R	10	3.60	8.10	9.40
20347-315E-12R	15	5.60	10.10	11.40
20347-320E-12R	20	7.60	12.10	13.40
20347-325E-12R	25	9.60	14.10	15.40
20347-330E-12R	30	11.60	16.10	17.40
20347-335E-12R	35	13.60	18.10	19.40
20347-340E-12R	40	15.60	20.10	21.40



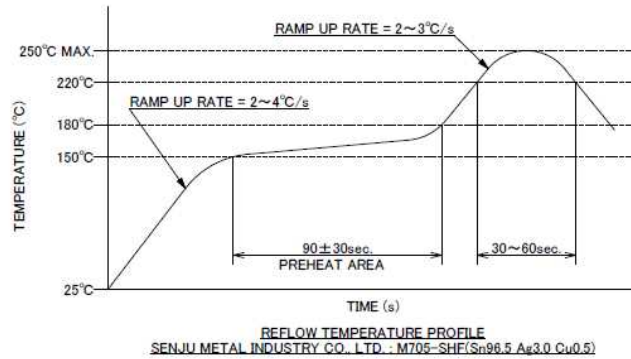
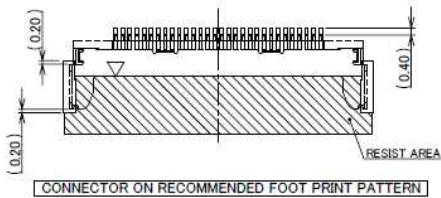
RECOMMENDED FOOT PRINT PATTERN & METAL MASK LAYOUT  
RECOMMENDED METAL MASK THICKNESS : t=0.12

NOTES.  
1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.  
2. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.

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# Receptacle Assembly

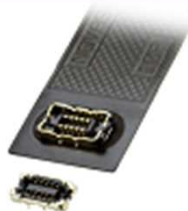


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ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO COAX : AWG# 44,42,40 DISCRETE : AWG# 36 TWINCOAX : AWG# 40
RATING VOLTAGE	100V AC (PER CONTACT)
RATING AMPERAGE (FOR CONTACT)	0.1A AC/DC [AWG#44] PER CONTACT / UP TO 40 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT / UP TO 40 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT / UP TO 40 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT / UP TO 12 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 235mohm MAX.(AWG#36) / AFTER TEST : <140mohm MAX. 560mohm MAX.(AWG#40) 650mohm MAX.(AWG#42) 1040mohm MAX.(AWG#44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : <140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000mohm MIN. / AFTER TEST : 500mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	10P : 20.0N MAX. 15P : 22.5N MAX. 20P : 25.0N MAX. 25P : 27.5N MAX. 30P : 30.0N MAX. 35P : 32.5N MAX. 40P : 35.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	10P : 4.0N MIN. 15P : 5.0N MIN. 20P : 5.5N MIN. 25P : 6.0N MIN. 30P : 7.0N MIN. 35P : 8.0N MIN. 40P : 8.5N MIN.
CABLE RETENTION FORCE	10P : 4.90N MIN. 15P : 7.35N MIN. 20P : 9.80N MIN. 25P : 12.25N MIN. 30P : 14.70N MIN. 35P : 17.15N MIN. 40P : 19.60N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	P/N 20347-3**E-12R : PRS-1461
TEST REPORT	P/N 20347-3**E-12R : TR-08068
PACKING STANDARD	300-308
INSTRUCTION MANUAL	HIM-03005
ASSEMBLY MANUAL	ASM-03002
APPEARANCE CRITERIA NO.	QLS-A***

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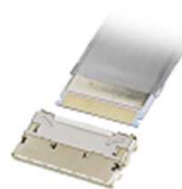
Board to  
Board



High-Density



Autolocking  
FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial  
/ Discrete Cable



High-Speed



RF



High-Frequency



Optical  
Module



High-Speed



Power



High-Power



I/O  
(Input/Output)



Quick charge



Effector



Custom  
Connectors  
Available

Inquiry



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