	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE		COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△						△					
△						△					

APPLICABLE STANDARD

RATING	Operating Temperature Range	-40℃～125℃ (Note1)	Storage Temperature Range	-10℃～60℃ (Note3)
	Operating Humidity Range	30%～70% (Note2)	Storage Humidity Range	Max 85% (Note3)
	Applicable Connector	KM32A-8P-SH(W)(800) KM32A-8P-SH(B)(800) KM32A-8P-SV(W)(CAP)(800) KM32A-8P-SV(B)(CAP)(800)	Current	5A
	Voltage	60V AC/DC		

SPECIFICATIONS

ITEM	TEST METHOD	SPECIFICATION	QT	AT
CONSTRUCTION				
General examination	Visually and by measuring instrument.	1. According to drawing.	o	o
Marking	Confirmed visually.		o	o
MECHANICAL CHARACTERISTICS				
Terminal contact force	Measure the contact force according to the amount of displacement.	1. Do the test but don't judge the result.	o	–
Terminal insertion and extraction force	Measure the insertion and removal force between terminals at a constant speed of 50mm/min at 1, 5, and 20 times.	1. Do the test but don't judge the result.	o	–
Terminal bending strength	Apply a force of 3N in the vertical direction of the crimping for 15 seconds.	1. Do the test but don't judge the result.	o	–
Terminal crimp tensile strength	Pull at a speed of 50mm/min.	1. 50N Min.	o	–
Between terminal housing insertion force	Insert at a speed of 50mm/min.	1. Do the test but don't judge the result.	o	–
Between terminal housing reverse insertion	Set at 180° and insert at a speed of 50mm/min.	1. Do the test but don't judge the result.	o	–
Housing single insertion force , extraction force	Insert and remove at a speed of 50mm/min.	1. Do the test but don't judge the result.	o	–
Connector insertion and extraction force	Insert and remove at a speed of 50mm/min.	1. 75N Max.	o	–
Connector reverse insertion force	Set at 180° and maintain a force of 150N at 50 mm/min for 30 seconds.	1. 150N Min.	o	–
Connector retention force	Pull at a speed of 50mm/min.	1. 100N Min.	o	–
Connector lock release force	Press and release the lock at a speed of 50mm/min.	1. 49N Max.	o	–
Terminal retention force (W/H)	Pull at a speed of 50mm/min.	1. 35N Min.	o	–
Terminal retention force (Board)	Pull at a speed of 50mm/min.	1. 15N Min.		
Connector coupling sound	Measure the coupling sound 4 times by tilting +30°, 0, -30° away from the sound level meter at 600mm.	1. Do the test but don't judge the result.	o	–

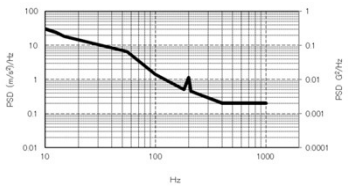
Remarks
Note 1: Include the temperature rising by current.
Note 2: No condensing.
Note 3: Apply to the condition of long term storage for unused products before pcb on board.
After pcb board , operating temperature and humidity range is applied for interim storage during transportation.

	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
	T.J PARK 24.07.10	T.J PARK 24.07.10	J.K SEO 24.07.10	J.E LEE 24.07.10	ENG 24.07.10 DEPT

NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST

HIROSE KOREA CO.,LTD.	SPECIFICATION SHEET	PART NO. KM32A-8S-HU(W)(800)

CODE NO.(OLD)	DRAWING NO.	CODE NO.	
CL	ELC4-631795-00	CL 6441-0059-1-800	1/3

ELECTRICAL CHARACTERISTICS				
Low level contact resistance	Apply microcurrent of 10 mA.	1. 25mΩ Max.	o	–
Voltage drop	Apply current 0.5A.	1. 25mV/A Max.	o	–
Temperature rise	Measure the temperature rise after applying the rated current.[Maximum current (11A) X reduction factor (0.5)]	1. 60℃ Max.	o	–
Insulation resistance	Measure the insulation resistance at DC 500V.	1. 1,000MΩ Max.	o	–
Voltage proof	Apply AC 1,000V for 1 minute.	1. No flashover.	o	–
ENVIRONMENTAL CHARACTERISTICS				
Mechanical operation	Insert and extraction 10 and 100 times repeatedly.	1. Low level contact resistance : 25mΩ Max. 2. Connector insertion and extraction force : 75N Max. 3 Terminal retention force : 35N Min. 4. Terminal surface observation : Base metal of the terminal must not be exposed.	o	–
Fall shock	Drop from a height of 1m.	1. No breaks or cracks that harms function.	o	–
Mechanical shock	Apply shock 10 times per direction.	1. Instant short circuit : no instant short circuit.	o	–
Long-term dry heat (stress relaxation characteristics)	Leave it at 105℃, 125℃, and 145℃ temperatures up to 1,000hr to check the terminal life.	1. Terminal contact force : Do the test but don't judge the result. 2. Low level contact resistance : 25mΩ Max.	o	–
Thermal shock	Leave it at 125℃ (Tmax.) and −40℃ (Tmin.) for about 1,000 cycles.	1. Low level contact resistance : 25mΩ Max. 2. Voltage drop : 25mV/A Max. 3. Terminal crimp tensile strength : 50N Min. 4. Terminal retention force : 35N Min. 5. Lock strength : 100N Min.	o	–
Salt spray	Spray 5% salt at ordinary temperature for 2 hours and leave at 40±2℃ 90～95% RH for 22 hours at 4 cycle and leave at ordinary temperature for 3 days.	1. Do the test but don't judge the result.	o	–
Dust resistance	Mix 3,000mg/m³ dust for 5 seconds every 15 minutes, 8 hours each.	1. Low level contact resistance : 25mΩ Max.	o	–
Chemical resistance	Immerse each chemical liquid according to temperature and deposition time.	1. Appearance: No corrosion, discoloration, cracking, etc. that harms function. 2. Low level contact resistance : 25mΩ Max.	o	–
Corrosion gas test	Expose to corrosion with 4 types of mixed gas(H_2S,NO_2,Cl_2,SO_2).	1. Terminal surface observation : Base metal of the terminal must not be exposed. 2. Low level contact resistance : 25mΩ Max.	o	–
Stress corrosion	Leave the product on a test table in a chamber with 100mL of an aqueous ammonia solution of at least 1% concentration.	1. Appearance : No corrosion, discoloration, cracking, etc. that harms function. 2. Terminal crimp tensile strength : 50N Min.	o	–
Complex environment	Apply temperature and vibration to the product according to directions. Temperature: 3class (−40～125℃) Vibration: 1class (overseas) 	1. Low level contact resistance : 25mΩ Max. 2. Voltage drop : 25mV/A Max. 3. Terminal retention force : 35N Min. 4. Lock strength : 100N Min. 5. Resistance variation monitor : 25mΩ Max. 6. Instant short circuit : no instant short circuit. 7. Terminal surface observation : Base metal of the terminal must not be exposed. 8. Terminal contact force : Do the test but don't judge the result.	o	–
Fretting corrosion	Microcoupling distance: 50 μm. Microcoupling frequency: 1～2 Hz. Microcoupling number of times: 10,000 times.	1. Do the test but don't judge the result.	o	–

NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST

HIROSE KOREA CO.,LTD.	SPECIFICATION SHEET	PART NO. KM32A-8S-HU(W)(800)

CODE NO.(OLD) CL	DRAWING NO. ELC4-631795-00	CODE NO. CL 6441-0059-1-800	2/3

Other characteristics(specific customer : panasonic)				
Whisker	Leave at room temperature, high temperature, high humidity, heat shock by the hour.	1. Insulation resistance : 100MΩ Max. 2. Whisker length : 50μm Max.	o	–
Electrical connect (solder connect) life test	Leave the thermal shock for each cycle and check for cracks.	1. No cracks in the soldering section. 2. Low level contact resistance : To have electrical continuity.	o	–

NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST

HIROSE KOREA CO.,LTD.	SPECIFICATION SHEET	PART NO. KM32A-8S-HU(W)(800)	
CODE NO.(OLD) CL	DRAWING NO. ELC4-631795-00	CODE NO. CL 6441-0059-1-800	3/3

F-1-021(Rev.0)