	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE		COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
1	8	RE-5-2033	Y.K.G	C.D.H	18.10.04	△					
2	1	RE-5-2988	C.Y.H	C.D.H	23.04.24	△					

APPLICABLE STANDARD

RATING	OPERATING TEMPERATURE RANGE	1 -40℃ ~ +105℃ ***(note1)***	STORAGE TEMPERATURE RANGE	-10℃ ~ +50℃(Packed Condition)
	VOLTAGE	50V [AC(rms) / DC]	OPERATING OR STORAGE HUMIDITY RANGE	RELATIVE HUMIDITY 90% MAX (NOT DEWED)
	CURRENT	1 0.5A [AC(rms) / DC] ***(note2)***	APPLICABLE CABLE	FPC/FFC (TYPE A : t=0.3±0.03mm) (TYPE B : t=0.3±0.05mm)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT	ACCORDING TO DRAWING	O	O
MARKING	CONFIRMED VISUALLY		O	O
ELECTRICAL CHARACTERISTICS				
CONTACT RESISTANCE	MATE APPLICABLE FPC/FFC AND APPLY A CURRENT OF AC 20mV MAX, 1mA	50 mΩ MAX. INCLUDING FPC/FFC BULK RESISTANCE(L=8mm)	O	O
INSULATION RESISTANCE	MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF DC 100V	500 MΩ MIN.	O	O
VOLTAGE PROOF	MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF 2 AC 150V FOR 1 min.	NO BREAKDOWN.	O	O
MECHANICAL CHARACTERISTICS				
FPC RETENSION FORCE 1	MEASURE BY APPLICABLE FPC/FFC(t=0.3) AT INITIAL CONDITION	①HORIZONTAL DIRECTION : 0.4N*n min. ②VERTICAL DIRECTION : 0.3N*n min. (n = Number of Contacts)***(note 3)***	O	-
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRATIONS	①CONTACT RESISTANCE: 50mΩ MAX ②NO DAMAGE,CRACK AND LOOSENESS OF PARTS	O	-
VIBRATION	FREQUENCY 10 ~ 55 Hz, TOTAL AMPLITUDE 1.5 mm AT 2h, IN 3 DIRECTIONS	①NO ELECTRICAL DISCONTINUITY OF 1μs. ②CONTACT RESISTANCE : 50mΩ MAX	O	-
SHOCK	981m/s^2 DIRECTION OF PULSE 6ms AT 3 TIMES IN 3 DIRECTIONS.	③NO DAMAGE,CRACK AND LOOSENESS OF PARTS	O	-
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT(STEADY STATE)	EXPOSED AT 40±2℃, 90~95 %, 96Hr.	①CONTACT RESISTANCE: 50 mΩ MAX. ②INSULATION RESISTANCE: 50MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	O	-
RAPID CHANGE OF TEMPERATURE 1	TEMPERATURE:-40±2→15~35→+105±2→15~35 ℃ TIME : 30 → 2~3 → 30 → 2~3 min. UNDER 5 CYCLES.		O	-
DAMP HEAT, CYCLE	TEMPERATURE -10→+65 HUMIDITY : 90~95% 10 CYCLE(240Hr)		O	-
DRY HEAT 1	EXPOSED AT 105±2℃, 96Hr	①CONTACT RESISTANCE : 50mΩ MAX	O	-
COLD	EXPOSED AT -40±2℃, 96Hr	②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	O	-
CORROSION SALT SPRAY	EXPOSED AT 35±2℃, 5±1% SALT WATER SPRAY FOR 48Hr	①CONTACT RESISTANCE 50mΩ MAX ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	O	-
HYDROGEN SULPHIDE	EXPOSED IN 3 PPM FOR 96Hr. (TEST STANDARD : JEIDA-38)	③NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.	O	-
RESISTANCE TO SOLDERING HEAT	1)REFLOW SOLDERING: PEAK TMP. : 250℃ MAX. TMP. 230℃ MIN FOR 60s 2)SOLDERING IRONS TMP. : 350±10℃ FOR 5±1s	①NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. ②NO DAMAGE OF ELECTRICAL PERFORMANCE	O	-
SOLDER ABILITY	SOLDER DIPPING TEMPERATURE 245±5℃ (TEST STANDARD : MIL-STD-202) FOR IMMERSION DURATION, 3±0.3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95% OF THE SURFACE BEING IMMERSED.	O	-

1 (note 1)
FOLLOW THE SPECIFICATIONS OF FPC/FFC IF IT'S ALLOWABLE MAXIMUM OPERATING TEMPERATURE IS BELOW 105℃

1 (note 2)
WHEN THE SAME VALUE OF CURRENT ARE APPLIED TO ALL CONTACTS AT THE SAME TIME IN ONCE, SET THE CURRENT TO THE 70% OF THE RATED CURRENT VALUE.

1 (note 3)
THERE'S A CASE WHICH FPC/FFC RETENTION FORCE DOESN'T FULFILL THE VALUE, BECAUSE FPC/FFC SPECIFICATION AFFECTS THE RESULT OF FPC/FFC RETENTION FORCE.

REMARKS CONDITIONS FOR TESTING	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
	B.J KIM	B.J KIM	D.H CHO	H.C SONG	ENG 23.04.24 DEPT
UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402.	18.03.02	18.03.02	18.03.02	18.03.02	

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

HIROSE KOREA CO.,LTD.	SPECIFICATION SHEET	PART NO. TF31-**S-0.5SH (800)

CODE NO.(OLD)	DRAWING NO.	CODE NO.	
CL	ELC4-632346	CL 6535-****-*-800	1/1

F-1-021(Rev.0)

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