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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

	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] ***(note 2)***	APPLICABLE CABLE	FPC/FFC (t=0.3±0.03mm)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT	ACCORDING TO DRAWING	O	O
MARKING	CONFIRMED VISUALLY			
ELECTRICAL CHARACTERISTICS				
CONTACT RESISTANCE	MATE APPLICABLE FPC/FFC AND APPLY A CURRENT OF AC 20mV MAX (1KHz), 1mA.	50mΩ MAX. INCLUDING FPC/FFC BULK RESISTANCE(L=8mm)	O	O
INSULATION RESISTANCE	MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF DC 100V.	500MΩ 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				
MECHANICAL OPERATION	20 TIMES INSERTIONS AND EXTRATIONS.	① CONTACT RESISTANCE : 50mΩ MAX. ② NO DAMAGE,CRACK AND LOOSENESS OF PARTS	O	-
VIBRATION	FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, - m/s^2 FOR 10 CYCLES IN 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1μs. ② CONTACT RESISTANCE : 50mΩ MAX. ③ NO DAMAGE,CRACK AND LOOSENESS OF PARTS	O	-
SHOCK	981m/s^2 DIRECTION OF PULSE 6ms AT 3 TIMES IN 3 DIRECTIONS.		O	-
FPC/FFC RETENSION FORCE 1	MEASURE BY APPLICABLE FPC/FFC. (THICKNESS OF FPC/FFC SHALL BE t=0.30mm AT INITIAL CONDITION.)	HORIZONTAL DIRECTION : 0.3N X n MIN. (n : NUMBER OF CONTACTS). ***(note 3)***	O	-
ENVIRONMENTAL CHARACTERISTICS				
RAPID CHANGE OF TEMPERATURE 1	TEMPERATURE : -40 → 15 TO 35 → +105 → 15 TO 35 ℃ TIME : 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES.	① CONTACT RESISTANCE : 50mΩ MAX. ② INSULATION RESISTANCE : 50MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS	O	-
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2℃, 90~95 %, 96h.		O	-
DAMP HEAT, CYCLE	TEMPERATURE : -10 TO +65℃ HUMIDITY : 90 TO 95% 10 CYCLE, TOTAL 240h.		O	-
DRY HEAT 1	EXPOSED AT 105±2℃, 96h.	① CONTACT RESISTANCE : 50mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS	O	-
COLD	EXPOSED AT -40±3℃, 96h.		O	-
CORROSION SALT MIST	EXPOSED AT 35±2℃, 5% SALT WATER SPRAY FOR 96h.	① CONTACT RESISTANCE : 50mΩ MAX. ② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR	O	-
SURPHUR DIOXIDE [JIS C 0090]	EXPOSED AT 40±2℃, RELATIVE HUMIDITY 80±5%, 25±5 PPM FOR 96h.		O	-
HYDROGEN SULPHIDE [JIS C 0092]	EXPOSED AT 40±2℃, RELATIVE HUMIDITY 80±5%, 10 TO 15 PPM FOR 96h.		O	-
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING : PEAK TMP. 250℃ MAX. REFLOW TMP.230℃ MIN. FOR 60 sec. 2) SOLDERING IRONS : TMP. 350±5℃ FOR 5±1 sec.	① NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS ② NO DAMAGE OF ELECTRICAL PERFORMANCE	O	-
SOLDERABILITY	SOLDER DIPPING TEMPERATURE 245±5℃, FOR IMMERSION DURATION, 3±0.3 sec.	A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95% OF THE SURFACR 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	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402.	B.J KIM 18.03.02	B.J KIM 18.03.02	D.H CHO 18.03.02	H.C SONG 18.03.02	ENG 23.04.24 DEPT

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

HIROSE KOREA CO.,LTD.	SPECIFICATION SHEET	PART NO. TF38-**S-0.5SV(830)

CODE NO.(OLD)	DRAWING NO.	CODE NO.	
CL	ELC4-632306	CL 6537-****-*-830	1/1