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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
△						△					
△						△					
APPLICABLE STANDARD											
RATING	OPERATING TEMPERATURE RANGE		-40°C ~ +105°C (note1)			STORAGE TEMPERATURE RANGE		-10°C ~ +50°C (Packed Condition)			
	VOLTAGE		50V [AC(rms) / DC]			OPERATING OR STORAGE HUMIDITY RANGE		RELATIVE HUMIDITY 90% MAX (NOT DEWED)			
	CURRENT		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				0	0
MARKING		CONFIRMED VISUALLY								0	0
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)				0	0
INSULATION RESISTANCE		MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF DC 100V				500 MΩ MIN.				0	0
VOLTAGE PROOF		MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF AC 150V FOR 1 min.				NO FLASHOVER OR BREAKDOWN.				0	0
MECHANICAL CHARACTERISTICS											
FPC RETENSION FORCE		MEASURE BY APPLICABLE FPC/FFC(t=0.3) AT INITIAL CONDITION				①HORIZONTAL DIRECTION : 6.4N min. ②VERTICAL DIRECTION : 4.8N min. (note3)				0	-
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRACTIONS				①CONTACT RESISTANCE: 50mΩ MAX ②NO DAMAGE, CRACK AND LOOSENESS OF PARTS				0	-
VIBRATION		FREQUENCY 10 ~ 55 Hz, TOTAL AMPLITUDE 1.5 mm AT 2h, IN 3 DIRECTIONS				①NO ELECTRICAL DISCONTINUITY OF 1μs. ②CONTACT RESISTANCE : 50mΩ MAX				0	-
SHOCK		981m/s ² DIRECTION OF PULSE 6ms AT 3 TIMES IN 3 DIRECTIONS.				③NO DAMAGE, CRACK AND LOOSENESS OF PARTS				0	-
ENVIRONMENTAL CHARACTERISTICS											
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2°C, 90~95 %, 96Hr.				①CONTACT RESISTANCE: 50 mΩ MAX.				0	-
RAPID CHANGE OF TEMPERATURE		TEMPERATURE:-40±2→15~35→+105±2→15~35 °C TIME : 30 → 2~3 → 30 → 2~3 min. UNDER 5 CYCLES.				②INSULATION RESISTANCE: 50MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.				0	-
DAMP HEAT, CYCLE		TEMPERATURE -10→+65 HUMIDITY : 90~95% 10 CYCLE(240Hr)								0	-
DRY HEAT		EXPOSED AT 105±2°C, 96Hr				①CONTACT RESISTANCE : 50mΩ MAX				0	-
COLD		EXPOSED AT -40±2°C, 96Hr				②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.				0	-
CORROSION SALT SPRAY		EXPOSED AT 35±2°C, 5±1% SALT WATER SPRAY FOR 48Hr				①CONTACT RESISTANCE 50mΩ MAX ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.				0	-
HYDROGEN SULPHIDE		EXPOSED IN 3 PPM FOR 96Hr. (TEST STANDARD : JEIDA-38)				③NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.				0	-
RESISTANCE TO SOLDERING HEAT		1)REFLOW SOLDERING: PEAK TMP. : 250°C MAX. TMP. 230°C MIN FOR 60s 2)SOLDERING IRONS TMP. : 350±10°C FOR 5±1s				①NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. ②NO DAMAGE OF ELECTRICAL PERFORMANCE				0	-
SOLDER ABILITY		SOLDER DIPPING TEMPERATURE 245±5°C (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 IMMERSERD.				0	-
<p>(note 1) FOLLOW THE SPECIFICATIONS OF FPC/FFC IF IT'S ALLOWABLE MAXIMUM OPERATING TEMPERATURE IS BELOW 105°C</p> <p>(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.</p> <p>(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.</p>											
REMARKS	CONDITIONS FOR TESTING				DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED		
					K.G.YANG	K.G.YANG	D.H.CHO	D.H.CHO			
					21.03.29	21.03.29	21.03.29	21.03.29			
UNLESS OTHERWISE SPECIFIED, REFER TO IEC 60512.											
NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST											
HIROSE KOREA CO.,LTD.				SPECIFICATION SHEET				PART NO. TF31-32(16)SB-1SH(800)			
CODE NO.(OLD)		DRAWING NO.			CODE NO.			1/1			
CL		ELC4-633349-80			CL 6535-0083-2-800			1/1			