




**THE DATASHEET OF
TF38-50S-0.5SV(830)**




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	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE		COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△	8	RE-5-2033	Y.K.G	C.D.H	18.10.04	△					
△	1	RE-5-2988	C.Y.H	C.D.H	23.04.24	△					
APPLICABLE STANDARD											
RATING	OPERATING TEMPERATURE RANGE	-40°C ~ +105°C (note 1)				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] (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				0	0
MARKING		CONFIRMED VISUALLY								0	0
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)				0	0
INSULATION RESISTANCE		MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF DC 100V.				500MΩ MIN.				0	0
VOLTAGE PROOF		MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF AC 150V FOR 1 min.				NO BREAKDOWN				0	0
MECHANICAL CHARACTERISTICS											
MECHANICAL OPERATION		20 TIMES INSERTIONS AND EXTRATIONS.				① CONTACT RESISTANCE : 50mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS				0	-
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.				0	-
SHOCK		981m/s ² DIRECTION OF PULSE 6ms AT 3 TIMES IN 3 DIRECTIONS.				③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS				0	-
FPC/FFC RETENSION FORCE		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)				0	-
ENVIRONMENTAL CHARACTERISTICS											
RAPID CHANGE OF TEMPERATURE		TEMPERATURE : -40 → 15 TO 35 → +105 → 15 TO 35 °C 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				0	-
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2°C, 90~95 %, 96h.								0	-
DAMP HEAT, CYCLE		TEMPERATURE : -10 TO +65°C HUMIDITY : 90 TO 95% 10 CYCLE, TOTAL 240h.								0	-
DRY HEAT		EXPOSED AT 105±2°C, 96h.				① CONTACT RESISTANCE : 50mΩ MAX.				0	-
COLD		EXPOSED AT -40±3°C, 96h.				② NO DAMAGE, CRACK OR LOOSENESS OF PARTS				0	-
CORROSION SALT MIST		EXPOSED AT 35±2°C, 5% SALT WATER SPRAY FOR 96h.				① CONTACT RESISTANCE : 50mΩ MAX.				0	-
SURPHUR DIOXIDE [JIS C 0090]		EXPOSED AT 40±2°C, RELATIVE HUMIDITY 80±5%, 25±5 PPM FOR 96h.				② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR				0	-
HYDROGEN SULPHIDE [JIS C 0092]		EXPOSED AT 40±2°C, RELATIVE HUMIDITY 80±5%, 10 TO 15 PPM FOR 96h.								0	-
RESISTANCE TO SOLDERING HEAT		1) REFLOW SOLDERING : PEAK TMP. 250°C MAX. REFLOW TMP. 230°C MIN. FOR 60 sec. 2) SOLDERING IRONS : TMP. 350±5°C FOR 5±1 sec.				① NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS ② NO DAMAGE OF ELECTRICAL PERFORMANCE				0	-
SOLDERABILITY		SOLDER DIPPING TEMPERATURE 245±5°C, FOR IMMERSION DURATION, 3±0.3 sec.				A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95% OF THE SURFACR BEING IMMERSED.				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						DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED	
						B.J KIM	B.J KIM	D.H CHO	H.C SONG		
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. TF38-**-S-0.5SV(830)			
CODE NO.(OLD)		DRAWING NO.			CODE NO.						1
CL		ELC4-632306			CL 6537-****-*-830						1

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