APPLICABLE STANDARD				
RATING	OPERATING TEMPERATURE RANGE	1 -30℃ TO +75℃	STORAGE TEMPERATURE RANGE	2 -40 ℃ TO +85 ℃
	VOLTAGE	DC30V MAX/AC40V MAX	OPERATING HUMIDITY RANGE	- % TO - %
	CURRENT	MAX 2 A	APPLICABLE CABLE	AWG24 TO AWG32

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X
ELECTRICAL CHARACTERISTICS				
CONTACT RESISTANCE	10 mA (DC OR 1000 Hz).	30 mΩ MAX.	X	X
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	mV MAX, – mA(DC OR 1000Hz).		-	-
INSULATION RESISTANCE	100 V DC.	1000 MΩ MIN.	X	-
VOLTAGE PROOF	250 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X
MECHANICAL CHARACTERISTICS				
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE 21.6 N MAX. WITHDRAWAL FORCE 6 TO 21.6 N.	X	-
MECHANICAL OPERATION	5000 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 50 mΩ MAX ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, - m/s² AT 2 h, FOR 3 AXIAL DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1μs MIN. ② CONTACT RESISTANCE: 50 mΩ MAX	X	-
SHOCK	490 m/s² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS,.	③ NO HEAVY DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-
ENVIRONMENTAL CHARACTERISTICS				
RAPID CHANGE OF TEMPERATURE	TEMPERATURE –55 →+5 TO +35→+85→+5 TO+ 35 °C TIME 30 → 5 → 30→ 5 min. UNDER 5 CYCLES.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 1000 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ℃, 90 TO 95 %, 96 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 10 MΩ MIN. (AFTER DRY) ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1	1	DIS-E-00000496	TS. ITO	NM. NISHIMATSU	16. 03. 08

REMARK

1 THE OPERATION TEMPERATURE INCLUDES THE TEMPERATURE RISE BY CURRENT CARRYING.

2 STORAGE TEMPERATURE RANGE SHOWS STORAGE CONDITION FOR UNUSED PRODUCTS EXCLUDING PACKING MATERIALS.FOLLOW THE OPERATING TEMPERATURE RANGE FOR STORAGE CONDITIONAFTER MOUNTING.

UNLESS OTHERWISE SPECIFIED, REFER TO IEC 60512.

APPROVED	NM. NISHIMATSU	15. 10. 27
CHECKED	KN. ICHIKAWA	15. 10. 27
DESIGNED	TS. ITO	15. 10. 27
DRAWN	AK. AKIYAMA	15. 10. 27

Note QT:Qualification Test AT:Assurance Test O:Applicable Test

DRAWING NO. ELC-120842-31-00

HRS	SPECIFICATION SHEET	PART NO.	MQ172X-4PA(31)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL206-2000-6-31	△1 1/2

FORM HD0011-2-1

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
DRY HEAT	EXPOSED AT 85 °C, 240 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 1000 MΩ MIN.	X	-
COLD	EXPOSED AT -55 °C, 240 h.	③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-
RESISTANCE TO SOLDERING HEAT	A PROFILE IS SHOWN IN FIG-1, UNDER 2 CYCLES.	NO DEFORMATION OR SIGNIFICANT LOOSENESS OF CONTACTS.	X	-

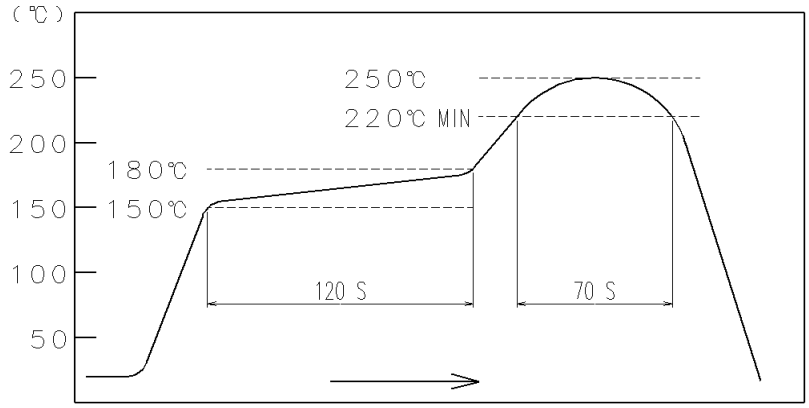

FIG – 1 RESISTANCE TO SOLDERING HEAT
(TEMPERATURE AT TOP SURFACE OF CONNECTOR)

RECOMMENDED PROFILE REFERS TO FIG – 2.
(TEMPERATURE AT SMT LEADS)

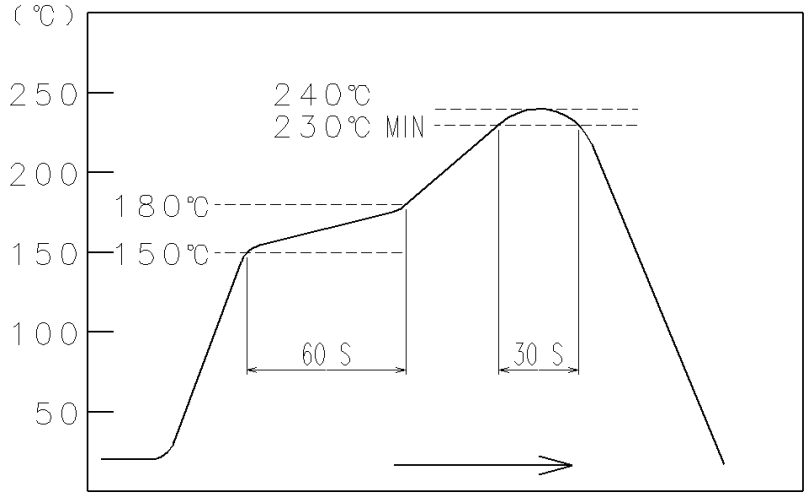

FIG – 2 RECOMMENDED REFLOW PROFILE TEMPERATURE