GENERAL SPECIFICATION OF
HS-7980TH ULTRA TORQUE DIGITAL SERVO

1. TECHNICAL VALUE

CONTROL SYSTEM
+:PULSE WIDTH CONTROL 1500usec NEUTRAL

OPERATING VOLTAGE RANGE
: 6.0V TO 7.4V

OPERATING TEMPERATURE RANGE
: -20°C TO +60°C (-4°F TO +140°F)

TEST VOLTAGE
: AT 6.0V

OPERATING SPEED
: 0.21sec/60' AT NO LOAD
: 0.17sec/60' AT NO LOAD

STALL TORQUE
: 36.0kg-cm(500oz.in)
: 44.0kg-cm(611oz.in)

STANDING TORQUE
: -

IDLE CURRENT
: 8mA AT STOPPED
: 10mA

RUNNING CURRENT
: 400mA/NO LOAD RUNNING
: 480mA/NO LOAD RUNNING

STALL CURRENT
: 8.100mA
: 9.900mA

DEAD BAND WIDTH
: 1usec

OPERATING TRAVEL
: 40±5'/ONE SIDE PULSE TRAVELING 400usec

DIRECTION
: CLOCK WISE/PULSE TRAVELING 1500 TO 1900usec

MOTOR TYPE
: CORELESS METAL BRUSH

POTENTIOMETER TYPE
: 4 SLIDER/1M CYCLE LONG LIFE/INDIRECT DRIVE

AMPLIFIER TYPE
: ATMega48 MCU DIGITAL AMPLIFIER WITH MOSFET DRIVE

DIMENSIONS
: 43.8x22.4x40.0mm (1.72x0.88x1.57in)

WEIGHT
: 78.2g (2.76oz)

BALL BEARING
: DUAL/ MR106

GEAR MATERIAL
: 1 METAL - PLASTIC & 3 TITANIUM ALLOY

HORN GEAR SPLINE
: 24 SEGMENTS/Ø5.76

SPLINED HORMS
: HEAVY DUTY/ HD-IS, HD-0, HD-LS, HD-IL, HD-LL, HD-LG, HD-IG

CONNECTOR WIRE LENGTH
: 300mm (11.81in)

CONNECTOR WIRE STRAND COUNTER: 80EA

CONNECTOR WIRE GAUGE: 20AWG

2. FEATURES

PROGRAMMABLE DIGITAL AMPLIFIER WITH MOSFET DRIVE
DURABLE TITANIUM ALLOY METAL GEARS WITH DUAL BALL BEARING
SEMIPERMANENT MAGNETIC ROTARY ENCODER
ULTRA HARDNESS GEAR SHAFT WITH 4 AXIAL METAL BUSHING
WATER & DUST RESISTANCE
HEAT SINK FOR MOTOR & MOSFET
FOR 2 CELL LITHIUM POLYMER BATTERY

3. APPLICATIONS
LARGE AIR PLANE MODELS

HITEC RCD KOREA INC.