

BEGIN DATE:NOV 01, 2007 **GENERAL SPECIFICATION OF** UPDATE:DEC 15,2008

## **HS-7980TH ULTRA TORQUE DIGITAL SERVO**

## 1.TECHNICAL VALUE

CONTROL SYSTEM

OPERATING VOLTAGE RANGE

OPERATING TEMPERATURE RANGE

TEST VOLTAGE OPERATING SPEED STALL TORQUE STANDING TORQUE IDLE CURRENT

RUNNING CURRENT STALL CURRENT

DEAD BAND WIDTH OPERATING TRAVEL

**DIRECTION** MOTOR TYPE

POTENTIOMETER TYPE

AMPLIFIER TYPE

**DIMENSIONS** WEIGHT

BALL BEARING

GEAR MATERIAL

HORN GEAR SPLINE

SPLINED HORNS

CONNECTOR WIRE LENGTH CONNECTOR WIRE STRAND COUNTER:80EA

CONNECTOR WIRE GAUGE

:+PULSE WIDTH CONTROL 1500usec NEUTRAL

:6.0V TO 7.4V

 $:-20^{\circ}C$  TO  $+60^{\circ}C(-4^{\circ}F$  TO  $+140^{\circ}F)$ 

:AT 6.0V AT 7.4V

:0.20sec/60° AT NO LOAD 0.18sec/60° AT NO LOAD :38.0kg.cm(527.71oz.in) 46.0kg.cm(638.81oz.in)

PREPARED BY JUN HEE, LEE

:8mA AT STOPPED 10mA

:360mA/NO LOAD RUNNING 430mA/NO LOAD RUNNING

:7,300mA

:2usec

:40±5°/ONE SIDE PULSE TRAVELING 400usec

:CLOCK WISE/PULSE TRAVELING 1500 TO 1900usec

:CORELESS METAL BRUSH

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

:ATMEGA48 MCU DIGITAL AMPLIFIÉR WITH MOSFET DRIVE

:43.8x22.4x40.0mm(1.72x0.88x55.55in)

:76.5q(2.7oz):DUAL/MR106

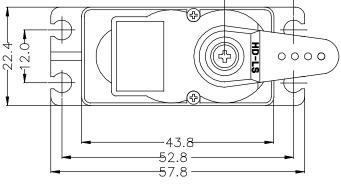
:1 METAL-PLASTIC & 3 TITANIUM ALLOY

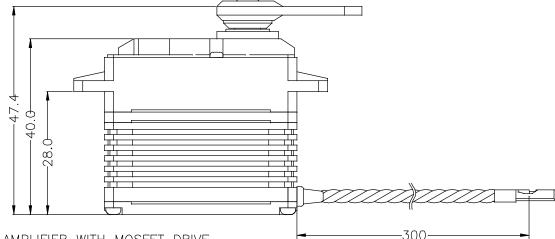
:24 SEGMENTS/Ø5.76

:HEAVY DUTY/HD-IS, HD-O, HD-LS, HD-IL, HD-LL, HD-LG, HD-IG

:300mm(11.81in)

:20AWG -15.7-(<del>(</del>)) 2.0





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