



ELECTRONICS

32 RANICK ROAD • HAUPPAUGE, N.Y. 11788-4295
VOICE: (631) 582-3400 FAX: (631) 582-3229
www.mgelectronics.com • e-mail: mgelec@spec.net



SPECIFICATIONS

Model: MGT2440P

1. SCOPE: This specifications is suitable to the AC adaptor of model MGT2440P designed to EI-57 wall mount.

2. APPLICABLE STANDARDS: UL1310

3. AGENCY SAFETY: UL

4. SURFACE, STRUCTURE:

4-1 Surface: Damage, rusting, foam, cracks are not permitted.

4-2 Appearance: Dimensions and express: As attached drawing.

5. ELECTRICAL CHARACTERISTICS:

5-1 Primary rated voltage & line frequency: 120 VAC 60 Hz 50 W

5-2 Secondary output ratings:

Input voltage	Output voltage	Tolerance	Rated current	No load voltage
120 VAC 60 Hz	AC 24 V	+/- 5%	1660 mA	AC 28 V Max.

5-3 Exciting current (I_o): 110 mA Max. at input 120 VAC 60 Hz without secondary load.

5-4 Primary rated current (I_p): 450 mA Max. at input 120 VAC 60 Hz with output current 1660 mA.

5-5 Ripple voltage: ----- mV (RMS) Max. at input ----- VAC ----- Hz with output current ----- mA.

5-6 Dielectric strength: The specified voltage shall be applied to each item as following without breakdown.

(1) Primary to Secondary & Core: 1.24 KV 60 Hz for one minute.

(2) Secondary to Core: 0.5 KV 60 Hz for one minute. Cut-off current: 1 mA Max.

At an alternative potentials, increasing 20% of voltage may be applied for one second in mass production.

5-7 Insulation test: 500 VDC 100 MΩ Min. between input plug and output plug and case.

5-8 Core loss: Input 120 VAC 60 Hz without secondary load, watts loss shall be under 5.0 W.

5-9 Temperature rise: Input 120 VAC 60 Hz with secondary load 1660 mA, shall not exceed 40 deg on case surface (By thermometer). 75 deg for primary winding (By resistance method). At ambient temp. 25°C.

6. MECHANICAL CHARACTERISTICS:

6-1 AC blade pull test: Pull AC blades by 1.5 kg for one minute without pull out from the case.

6-2 Dropping 4 times from 90 cm onto a wooden board 3 cm thickness, and make sure of no electrical hazardous is found, no separateness of enclosure and no internal components are exposed.

7. TEMPERATURE RANGE:

7-1 Normal operating temperature at: -10°C ----- +40°C

7-2 Storage temperature at: -20°C ----- +70°C

7-3 Normal operating humidity at: 30% ----- 85% R.H.

8. NET WEIGHT (APPROX.): 707 g.

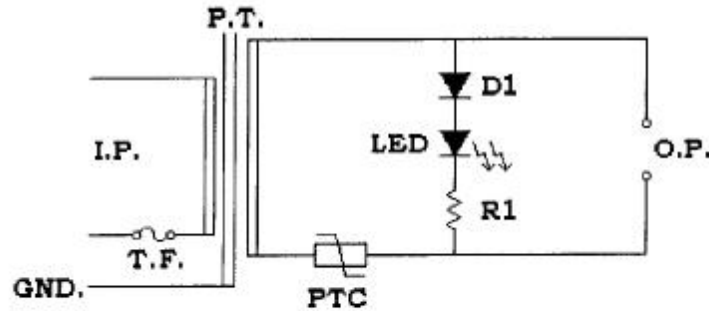


ELECTRONICS

32 RANICK ROAD • HAUPPAUGE, N.Y. 11788-4295
 VOICE: (631) 582-3400 FAX: (631) 582-3229
 www.mgelectronics.com • e-mail: mgelec@spec.net

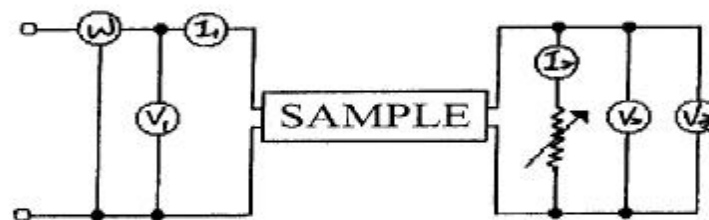


CIRCUIT DIAGRAM



SYMBOL	PARTS NAME	SPECIFICATION
I.P.	Input plug	US flat pin (with grounding pin)
P.T.	Power transformer	EJ-48
T.F.	Thermal fuse	130°C 250V 1A
D1	Diodes	1N4001 (1A 50V) or 1N4002 (1A 100V)
R1	Resistor	1K Ω (1/4W) C.F type
LED		Color: Green 5 \emptyset
PTC	Poly-switch	RUE400
GND.	Grounding	Connected to the core inside
O.P.	Output screw	3.5mm \times 6mm

TEST CIRCUIT



W: wattmeter (class 0.5)
 V1: AC voltmeter (class 0.5)
 I1: AC ammeter (class 0.5)
 V2: DC voltmeter (class 0.5)
 I2: DC ammeter (class 0.5)
 V3: AC rms voltmeter (for ripple test) (class 0.5)
 (not apply for AC output)

Note:

Conditions for making measurement and test are follow:
 Ambient temperature: 15°C to 35°C
 Relative humidity: 25% to 85%
 Air pressure: 86kPa to 106kPa

If there is any doubt about the result, measurements shall be made within the following limits:
 Ambient temperature: 25°C \pm 2°C
 Relative humidity: 60% to 70%
 Air pressure: 86kPa to 106kPa



ELECTRONICS

32 RANICK ROAD • HAUPPAUGE, N.Y. 11788-4295
 VOICE: (631) 582-3400 FAX: (631) 582-3229
 www.mgelectronics.com • e-mail: mgelec@spec.net



MATERIAL LIST

Components & Specification

No.	Components	Specification	Manufacturer	Approval
1	Bobbin	UL Recognized Plastic 94V-2 125C Nylon 66 Zytel 101L, 0.74 mm Min	E I Dupont de nemours & Co., Ltd	E41938
2	Thermal fuse	EYP1BF130 (130°C 1A 250V) 323 (130°C 1A 250V) M33 (130°C 2A 250V)	Matsushita electric Co., Ltd Uchihashi estec Co., Ltd Joint Force metal research	E60271 E50082 E142267
3	Primary wrap	Mylar tape t=0.025 mm 2 turns 31CT or PZ280 Press board t=0.25 mm 1 turn	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd	E34833 E178516 E105147
4	Primary lead wire fixed	Mylar tape t=0.025 mm 2 turns 31CT or PZ280	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd	E34833 E178516 E105147
5	Primary outer wrap	Mylar tape t=0.025 mm 2 turns 31CT or PZ280 Press board t=0.25 mm 1 sheet	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd Abekawa Kogyo Co., Ltd.	E34833 E178516 E105147
6	Secondary wrap	Mylar tape t=0.025 mm 2 turns 31CT or PZ280 Press board t=0.25 mm 1 sheet	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd	E34833 E178516 E105147
7	Primary cross over	Acetate tape t=0.36 mm 1 sheet	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd	E34833 E178516 E105147
8	Winding	Polystyrene enameled copper wire 2UEW wire	Walsin Lihwa electric wire Tai-I electric wire & cable Ta-Ya electric wire & cable	E70566 E85640 E84201
9	Core	Silicon Steel 0.5mm thickness	Kawasaki core New Nippon seitetsu Co., Ltd	
10	Lead wire	PRI: UL 1015 AWG#22 105°C 600V SEC: UL 1007 AWG#22 80°C 300V GND: UL 1015 AWG#18 600V	Walsin Lihwa electric wire Pacific electric wire & cable Wonderful wire cable Co., Ltd	E70566 E41396 E77981
11	PC board	16mm thickness 94V-0 LS-402	Chih Hsien enterprise	E105119
12	Rectifier	1N4001 (1A 50V) or 1N4002 (1A 100V)	Qua-tron electrics industrial Master instrument corporation	
13	Resistor	1KΩ (1/4W) C.F type	Ralec electronic corp Sunlly seitetsu Co., Ltd Or equivalent	
14	LED	Color: Green 5Ø	Sanlly electronics Jyham enterprise Co., Ltd Or others	
15	Poly-switch	RUE400	Raychem Corp	E74889
16	Blade	Nickel plated copper 1.5mm thickness US flat pin (with grounding pin)	GE plastic Tonlong Corp Or others	E45587
17	Fixed screw	3.5mm × 16mm with washer 8Ø (O.D)	Ton shell screw Co., Ltd Or others	
18	Output screw	3.5mm × 6mm	Ton shell screw Co., Ltd Or others	
19	Case	Noryl (SE-100;PX-1005) UL94V-1 or ABS	GE plastic Chi mei enterprise Co., Ltd	E45587 E56070
20	Name plate	Injection with case (Heat stamp)	I Hong Or equivalent	



ELECTRONICS

32 RANICK ROAD • HAUPPAUGE, N.Y. 11788-4295
 VOICE: (631) 582-3400 FAX: (631) 582-3229
 www.mgelectronics.com • e-mail: mgelec@spec.net

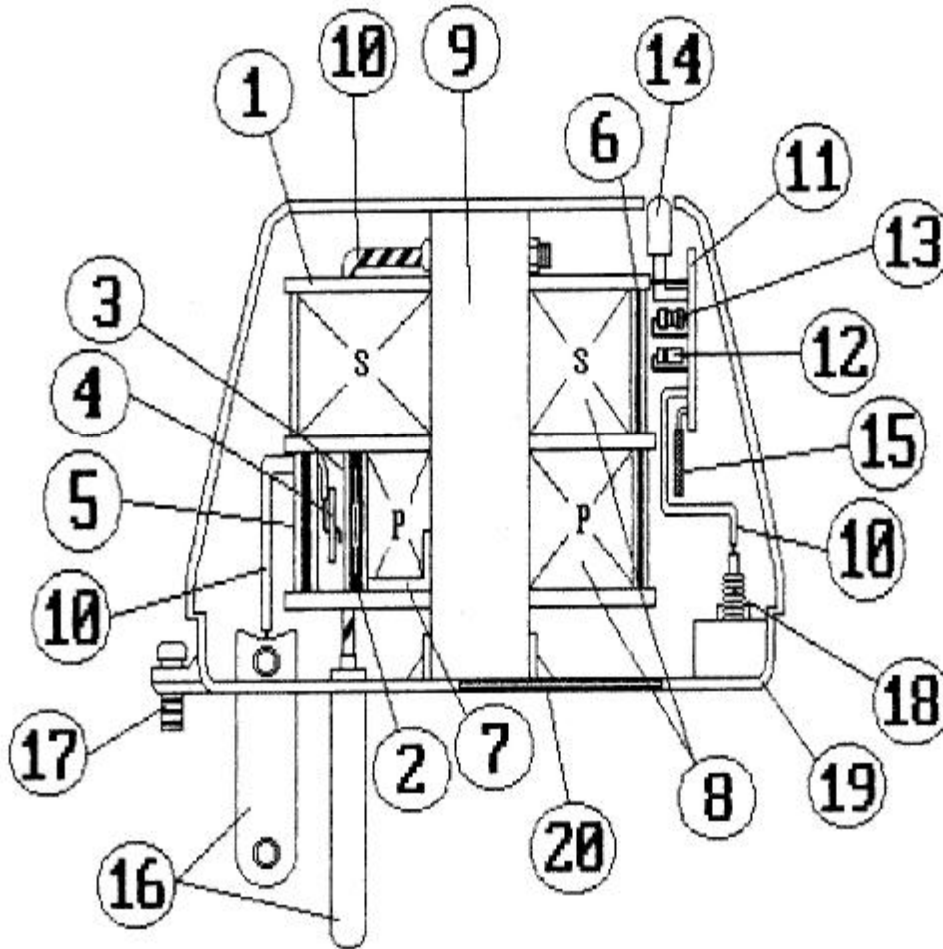


DRAWING NO.

圖 號

Applied model

使用機種



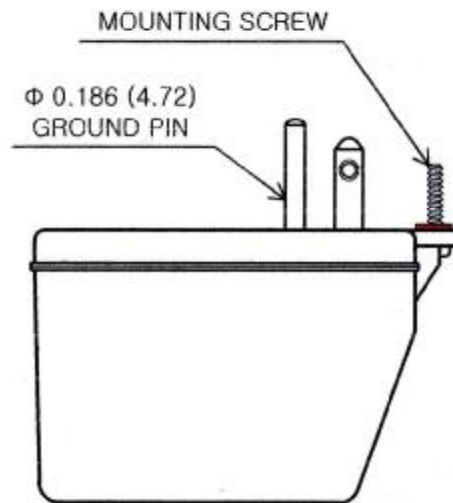
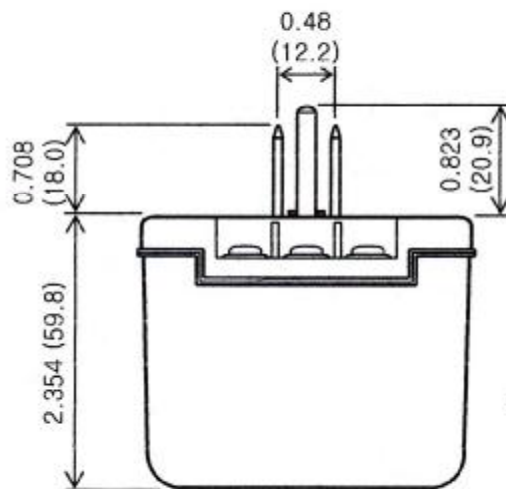
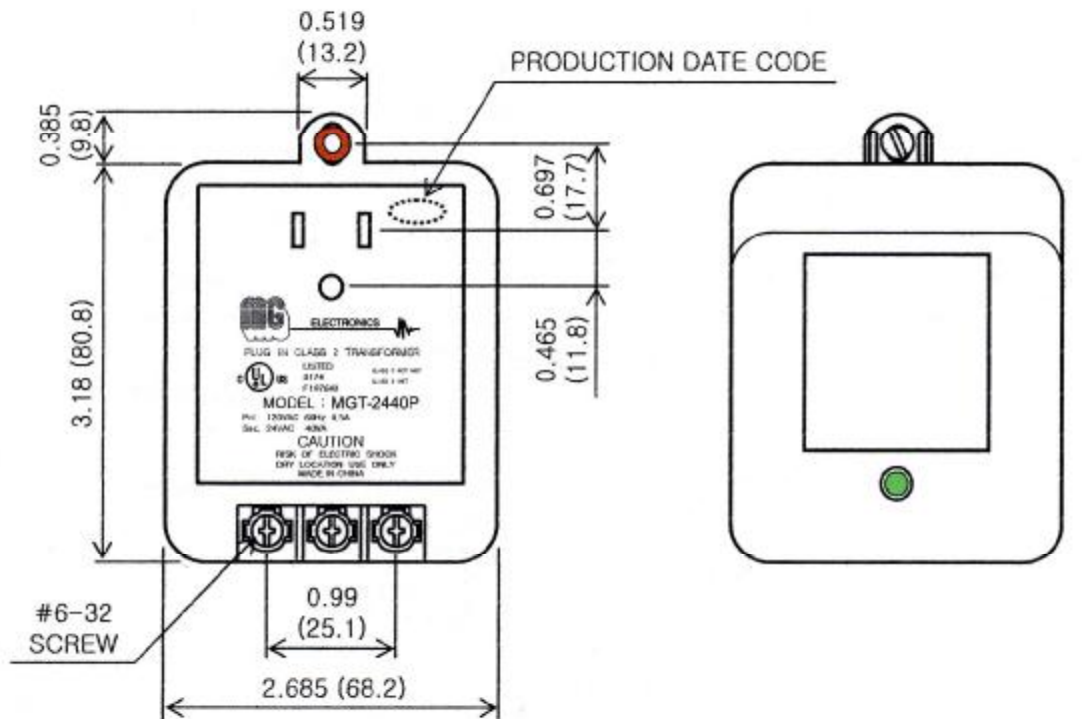
COLOR		Revised date	Revised status	Approved
UNIT				
MATERIAL				
REVISION				
Prepared by	李宗勤	Approved by	康清彬	Issued date MAY. 18, 2002

CUSTOMER

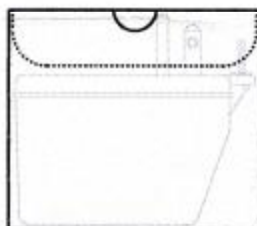
M AND G ELECTRONICS SALES CORP.

PART NO.

MGT-2440-P



※ INDIVIDUAL PACKAGING.



※ ENCLOSURE COLOR : WHITE

※ SIZE UNIT : INCH (MM)

※ TOLERANCE : ± 1.0 mm