

FL E502650

Features

- · Glass Passivated Die Construction
- · High Surge Current Capability
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Vacuum Soldering Process Minimize The Solder Voids, Typical Voids Are 2% And Max Voids Less Than 8%

35 Amp Three Phases Bridge Rectifier 400 to 1600 Volts

Maximum Ratings

• Operating Junction Temperature Range: -55°C to +150°C

• Storage Temperature Range: -55°C to +150°C

 \bullet Maximum Thermal Resistance: 1.3°C/W Junction to Case

• Typical Thermal Resistance: 0.85°C/W Junction to Case

Mechanical Data

• Mounting Torgue: 2 N·m Maximum

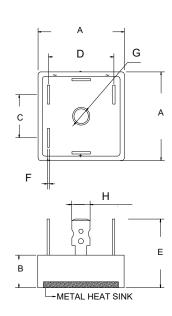
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|---|---------------------------|-----------------------------------|
| MT3504A | MT3504A | 400V | 280V | 400V |
| MT3506A | MT3506A | 600V | 420V | 600V |
| MT3508A | MT3508A | 800V | 560V | 800V |
| MT3510A | MT3510A | 1000V | 700V | 1000V |
| MT3512A | MT3512A | 1200V | 840V | 1200V |
| MT3514A | MT3514A | 1400V | 980V | 1400V |
| MT3516A | MT3516A | 1600V | 1120V | 1600V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 35A | T _C = 55°C |
|---|--------------------|---------------------|---|
| Forward Surge Current(Nonrepetitive) | I _{FSM} | 400A | 60Hz Sine Wave,1 Cycle, |
| Peak Forward Voltage | V_{FM} | 1.2V | I _{FM} =17.5A,Pulse Measurement, Rating of Per Diode |
| Peak Reverse Current | I _{RRM} | 10μΑ | Pulse Measurement Rating of Per Diode |
| Current Squared Time | l²t | 660A ² S | 1ms <t<8.3ms diode<="" of="" per="" rating="" td=""></t<8.3ms> |
| Dielectric Strength | Vdis | 2.5KV | AC 1min,Terminals to Case |

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a

MT-35A



| DIMENSIONS | | | | | | |
|------------|--------|-------|-------|-------|------|--|
| DIM | INCHES | | MM | | NOTE | |
| DIIVI | MIN | MAX | MIN | MAX | NOTE | |
| Α | 1.110 | 1.134 | 28.20 | 28.80 | | |
| В | 0.354 | 0.394 | 9.00 | 10.00 | | |
| С | 0.610 | 0.650 | 15.50 | 16.50 | | |
| D | 0.917 | 0.957 | 23.30 | 24.30 | | |
| Е | 0.9 | 944 | 25. | .00 | TYP. | |
| F | 0.029 | 0.033 | 0.75 | 0.85 | | |
| G | 0.193 | | 4.90 | | TYP. | |
| Н | 0.244 | 0.251 | 6.20 | 6.40 | | |



Curve Characteristics

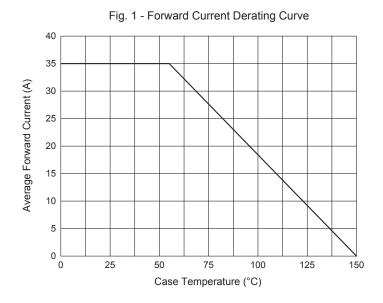


Fig. 3 - Typical Instantaneous Forward Characteristics

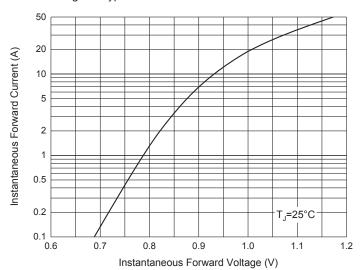


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

300

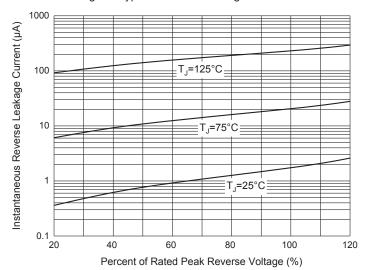
400

300

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

| Device | Packing | |
|----------------|----------------------------|--|
| Part Number-BP | Bulk: 50PCS/BOX:400PCS/CTN | |

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