



35A, 600V - 1000V Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- Typical I_R less than $0.1\mu A$
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



TS-6P





MECHANICAL DATA

Case: TS-6P

Molding compound, UL flammability classification rating 94V-0

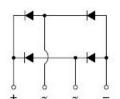
Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test **Polarity:** Polarity as marked on the body **Mounting torque:** 8.17 in-lbs maximum

Weight: 7.15 g (approximately)



| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted) | | | | | | |
|--|--------------------|--------------|----------|------------------|------|--|
| PARAMETER | SYMBOL | TS35P05G | TS35P06G | TS35P07G | UNIT | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 600 | 800 | 1000 | V | |
| Maximum RMS voltage | V _{RMS} | 420 | 560 | 700 | V | |
| Maximum DC blocking voltage | V _{DC} | 600 | 800 | 1000 | V | |
| Maximum average forward rectified current | I _{F(AV)} | 35 | | • | Α | |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 350 | | А | | |
| Rating for fusing (t<8.3ms) | l ² t | 508 | | A ² s | | |
| Maximum instantaneous forward voltage (Note 1) @ 17.5 A | V _F | 1.1 | | V | | |
| Maximum reverse current @ rated V_R T_J =25°C T_J =125°C | I _R | 10 500 | | μA | | |
| Typical thermal resistance (Note 2) | $R_{	heta JC}$ | 0.6 | | °C/W | | |
| Operating junction temperature range | TJ | - 55 to +150 | | | °C | |
| Storage temperature range | T _{STG} | - 55 to +150 | | | °C | |

Note 1: Pulse test with PW=300µs, 1% duty cycle

Note 2: With idea heatsink



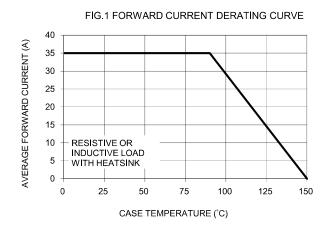
| ORDERING INFORMATION | | | | | | |
|----------------------|--------------------|-----------------|----------------------------|---------|------------------|--|
| PART NO. | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX (*) | PACKAGE | PACKING | |
| TS35P0xG (Note 1) | Н | C2 | G | TS-6P | 15 / TUBE | |
| | | X0 | | TS-6P | Forming | |
| | | D2 | | TS-6P | 15 / TUBE (Auto) | |

Note 1: "x" defines voltage from 600V (TS35P05G) to 1000V (TS35P07G)

| EXAMPLE | | | | | | |
|--------------------|----------------------|---|--------------|------------------------|--------------------------------------|--|
| PREFERRED PART NO. | PART NO. PACKING COL | | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION | |
| TS35P07GHC2G | TS35P07G | Н | C2 | G | AEC-Q101 qualified Green compound | |

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)



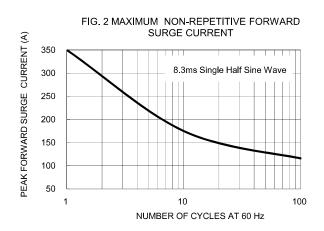


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

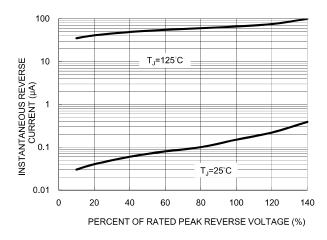


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

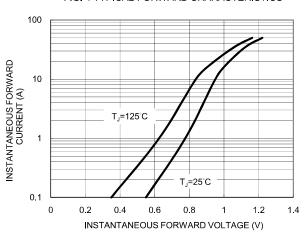
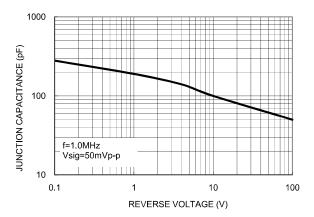
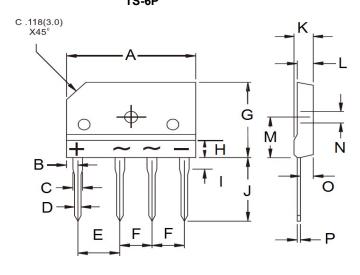




FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS TS-6P



| DIM. | Unit | (mm) | Unit(inch) | | |
|------|-------|-------|------------|-------|--|
| | Min | Max | Min | Max | |
| Α | 29.70 | 30.30 | 1.169 | 1.193 | |
| В | 2.30 | 2.70 | 0.091 | 0.106 | |
| С | 2.00 | 2.40 | 0.079 | 0.094 | |
| D | 0.90 | 1.10 | 0.035 | 0.043 | |
| E | 9.80 | 10.20 | 0.386 | 0.402 | |
| F | 7.30 | 7.70 | 0.287 | 0.303 | |
| G | 19.70 | 20.30 | 0.776 | 0.799 | |
| Н | - | 4.80 | - | 0.189 | |
| I | 3.80 | 4.20 | 0.150 | 0.165 | |
| J | 17.00 | 18.00 | 0.669 | 0.709 | |
| K | 4.40 | 4.80 | 0.173 | 0.189 | |
| L | 3.40 | 3.80 | 0.134 | 0.150 | |
| М | 10.80 | 11.20 | 0.425 | 0.441 | |
| N | 3.10 | 3.40 | 0.122 | 0.134 | |
| 0 | 2.50 | 2.90 | 0.098 | 0.114 | |
| Р | 0.65 | 0.75 | 0.026 | 0.030 | |

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound YWW = Date Code

F = Factory Code





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