



HBS402 THRU HBS410

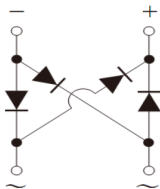
Surface Mount Bridge Rectifier

Features

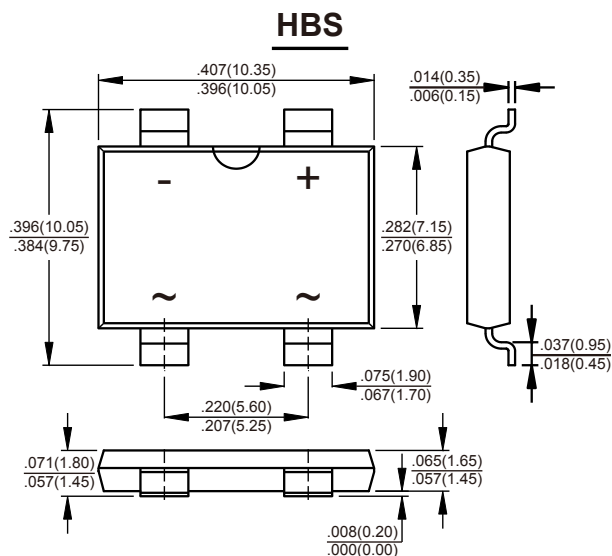
- ★ Glass passivated chip junction
- ★ High surge current capability
- ★ High heat dissipation capability
- ★ Low profile package
- ★ Low forward voltage drop

Mechanical Data

- ★ Case: Molded plastic, HBS
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202, method 208
- ★ Polarity: : As marked on body



Voltage Range 200 to 1000 V
Current 4.0 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | HBS402 | HBS404 | HBS406 | HBS408 | HBS410 | UNIT | |
|--|-----------------|----------------------|--------|--------|--------|--------|------|--------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS voltage | V_{RMS} | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC blocking voltage | V_{DC} | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum average forward rectified current @ $T_C=120^\circ C$ | $I_{F(AV)}$ | 4.0 | | | | | | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I_{FSM} | 120 | | | | | | A |
| Maximum instantaneous forward voltage @ $I_F=1.0A$ @ $I_F=2.0A$ @ $I_F=4.0A$ | V_F | 0.89 0.93 0.98 | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ C$ @ $T_A=125^\circ C$ | I_R | 5 100 | | | | | | μA |
| Typical junction Capacitance (Note 1) | C_J | 33 | | | | | | pF |
| Typical thermal resistance from junction to ambient | $R_{\theta JA}$ | 67 | | | | | | $^\circ C/W$ |
| Typical thermal resistance from junction to lead | $R_{\theta JL}$ | 11 | | | | | | $^\circ C/W$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | $^\circ C$ |

NOTE : (1) Measured at 1.0 MHz and applied reverse voltage of 5.0 Volts DC.

RATINGS AND CHARACTERISTICS CURVES HBS402 THRU HBS410

Fig.1 - Forward Current Derating Curve

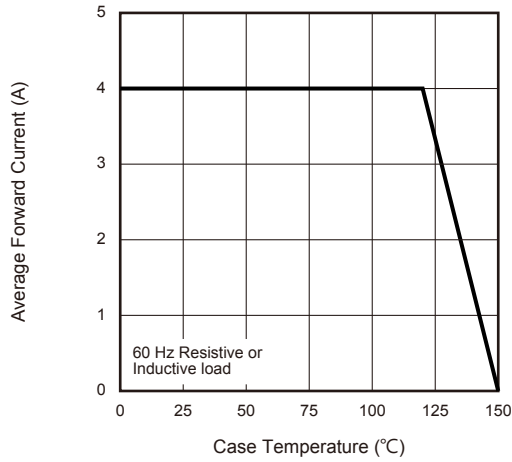


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

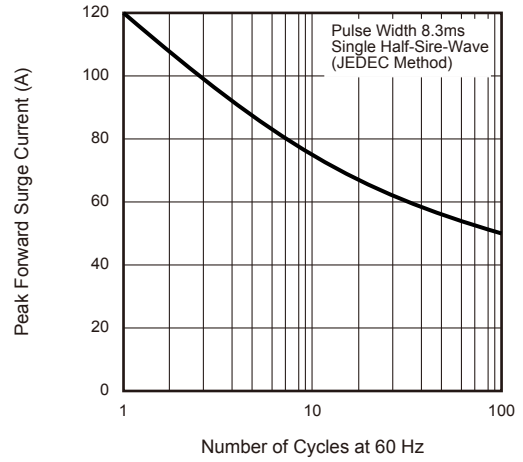


Fig.3 - Typical Instantaneous Forward Characteristics

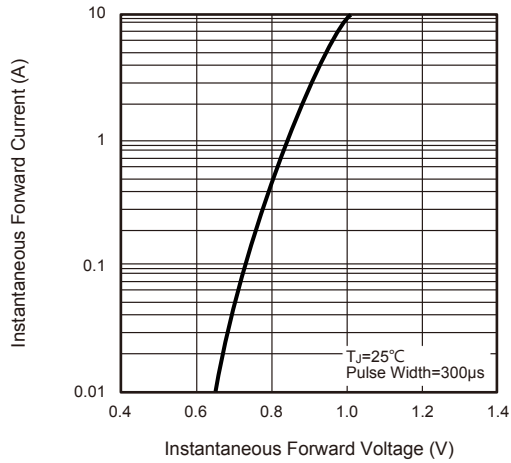


Fig.4 - Typical Reverse Leakage Characteristics

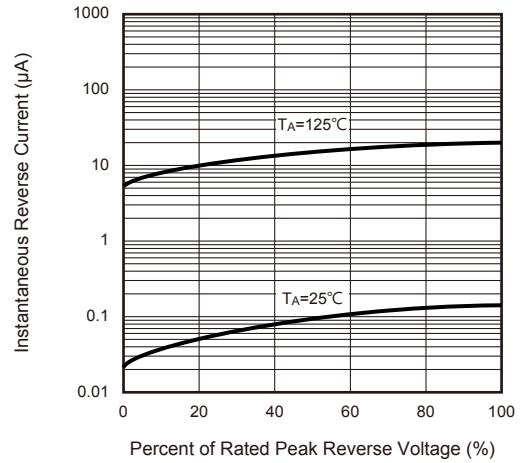


Fig.5 - Typical Junction Capacitance

