

YENYO

HBS402 THRU HBS410

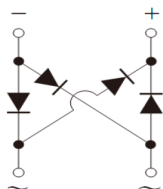
Surface Mount Bridge Rectifier

Features

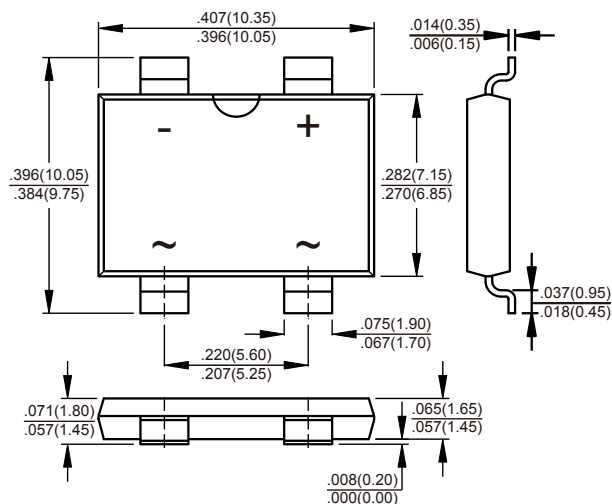
- ★ Glass passivated chip junction
- ★ High surge current capability
- ★ High heat dissipation capability
- ★ Low profile package
- ★ Low forward voltage drop

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**

HBS



Dimensions in inches and (millimeters)

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 @ $T_C=120^\circ\text{C}$	$I_{F(AV)}$	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 @ $I_F=1.0\text{A}$ @ $I_F=2.0\text{A}$ @ $I_F=4.0\text{A}$	V_F	0.89 0.93 0.98					V
Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	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					$^\circ\text{C/W}$
Typical thermal resistance from junction to lead	$R_{\theta JL}$	11					$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150					$^\circ\text{C}$

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

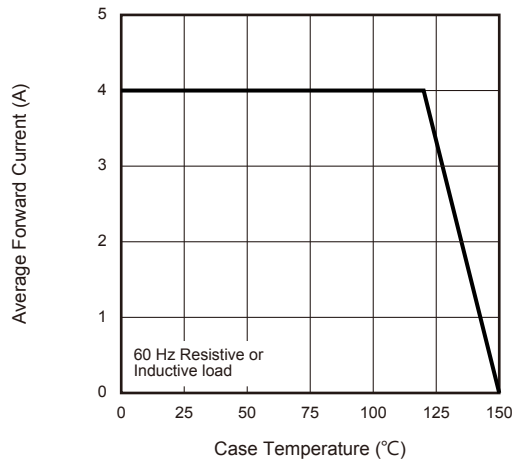


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

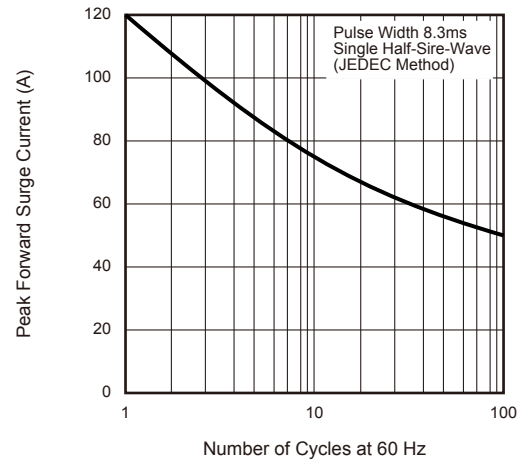


Fig.3 - Typical Instantaneous Forward Characteristics

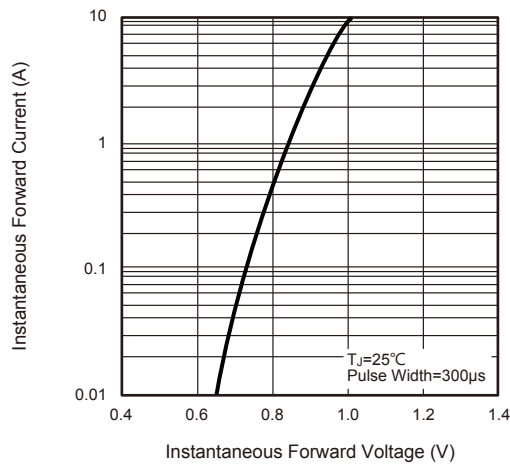


Fig.4 - Typical Reverse Leakage Characteristics

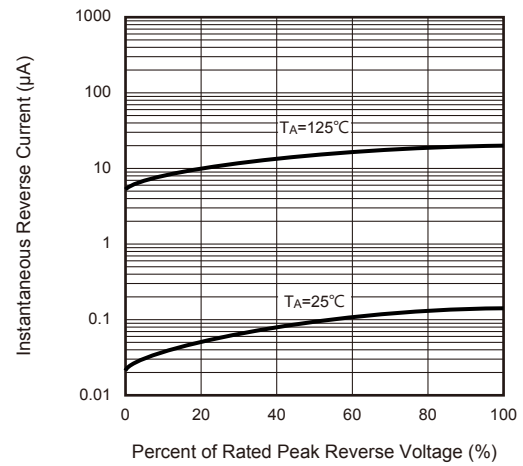


Fig.5 - Typical Junction Capacitance

