GAH401 thru GAH404

Press Fit Automotive Rectifier (HITACHI)
Voltage Range 100 to 400Volts Current 40 Amps

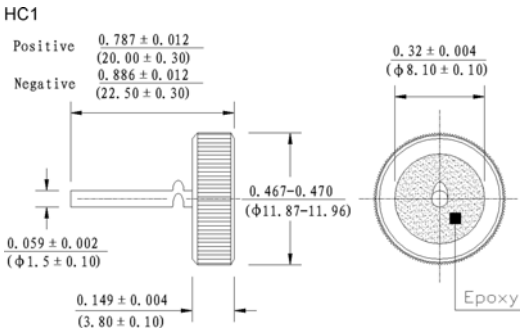
Technical Specification:

Features:

- Low leakage
- Low forward voltage drop
- High current capability
- High forward surge current capability

Mechanical Data:

- Technology: Vacuum soldered
- Case: Copper case
- Glass passivated chip
- Polarity: As marked of case bottom
- Lead: Plated Ni lead, solderable per MIL-STD-202E method 208C
- Mounting: Press Fit
- Weight: 0.11 ounces, 3.15 grams



Dimensions in inches and (millimeters)

■Maximum Ratings and Electrical Characteristics

- Rating at 25ºC ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

Parameters	Symbols	GAH401	GAH402	GAH403	GAH404	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	300	400	Volts
Maximum RMS voltage	V_{RMS}	70	140	210	280	Volts
Maximum DC blocking voltage	V_{DC}	100	200	300	400	Volts
Maximum Average rectified forward current at T_C=105°C	I_O	40				Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	500				Amps
Rating for fusing (t<8.3mS)	I^2t	1038				A^2S
Maximum instantaneous forward voltage drop at 100A	V_F	1.08				Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25°C T_A=100°C	I_R	5.0 450				uA
Typical thermal resistance	$R_{\theta JL}$	0.8				°C/W
Operating and storage temperature range	T_J, T_{STG}	-65 to +175				°C

Notes: 1. Enough heatsink must be considered in application.

■Ratings and Characteristic Curves

FIG.1–TYPICAL FORWARD CURRENT DERATING CURVE

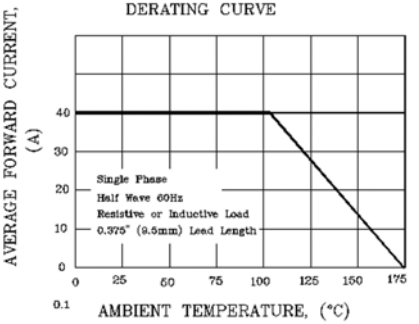


FIG.2–MAXIMUM NON–REPETITIVE PEAK FORWARD SURGE CURRENT

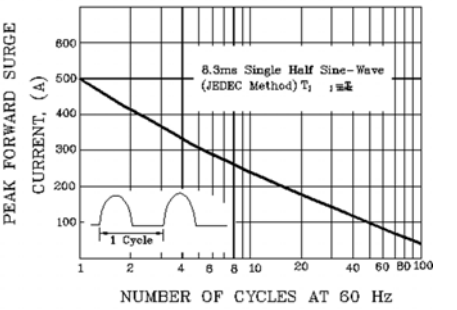


FIG.3–TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

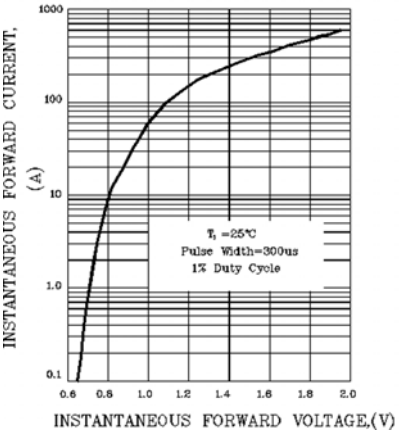


FIG.4– FORWARD POWER DISSIPATION

