# Flyback Transformer LED Driver 



- Designed for PWM Dimming of High-Brightness LEDs
- Bias winding output: $18 \mathrm{~V}, 20 \mathrm{~mA}$
- 400 V input; $110 \mathrm{~V}, 0.4 \mathrm{~A}$ output
- 1500 Vrms primary and bias to secondary isolation

Core material Ferrite
Terminations RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight 21.3 g
Ambient temperature $-40^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$
Storage temperature Component: $-40^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$.
Packaging: $-40^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$
Resistance to soldering heat Max three 40 second reflows at $+260^{\circ} \mathrm{C}$, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at $<30^{\circ} \mathrm{C} /$ $85 \%$ relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging 24 parts per tray
PCB washing Only pure water or alcohol recommended

| Part number | $\begin{gathered} \text { Inductance } \\ \text { at } 0 \text { Adc } \\ \pm 10 \%(\mu \mathrm{H}) \\ \hline \end{gathered}$ | Inductance at Ipk $^{2}$ $\min (\mu \mathrm{H})$ | DCR max (Ohms) | Leakage Inductance ${ }^{3}$ $\max (\mu \mathrm{H})$ | Turns ratio |  | Ipk ${ }^{2}$ <br> (A) | Output ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | pri : sec | pri : bias |  |  |
| GA3502-BL | 800 | 720 | 1.283 (pins 1-3) | 6.60 | 1:0.035 | 1:0.06 | 0.75 | 110 V, 0.4 A |
|  |  |  | 0.146 (pins 5-6) |  |  |  |  |  |
|  |  |  | 0.361 (pins 12-7) |  |  |  |  |  |

1. Inductance is for the primary (pins 1-3), measured at $250 \mathrm{kHz}, 0.3 \mathrm{Vrms}$.
2. Peak primary current drawn at minimum input voltage.
3. Leakage inductance is for the primary winding (pins $1-3$ ) with the secondary winding shorted.
4. Output is for the secondary. Bias winding output is $18 \mathrm{~V}, 20 \mathrm{~mA}$.
5. Electrical specifications at $25^{\circ} \mathrm{C}$.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.


