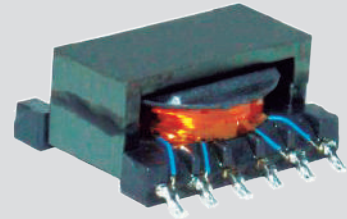


# GDAU-001

## Isolated SMD Gate Drive Transformer up to 150V $\mu$ s

INDUCTIVE COMPONENTS / GATE-DRIVE TRANSFORMER



### APPLICATIONS

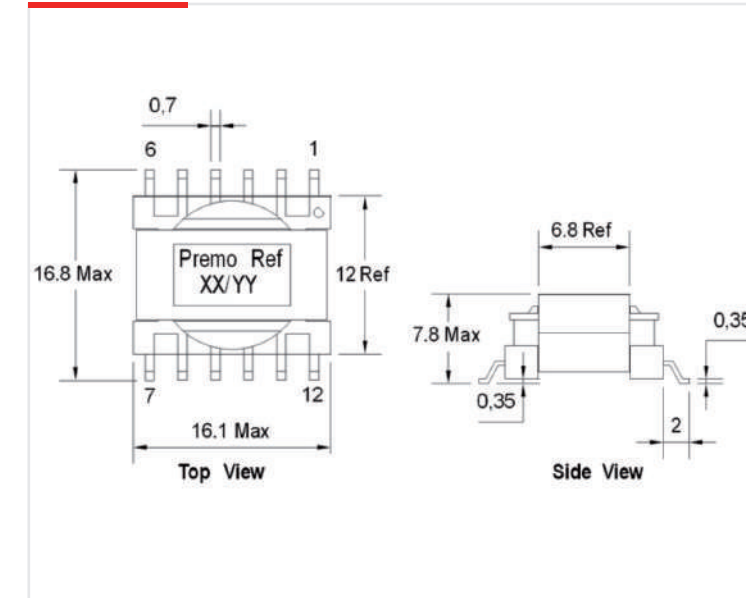
- › Half- or full-bridge MOS transistors control in SMPS
- › Automotive EV/HEV DC/DC converters and battery chargers
- › Industrial high power SMPS

### 01 FEATURES

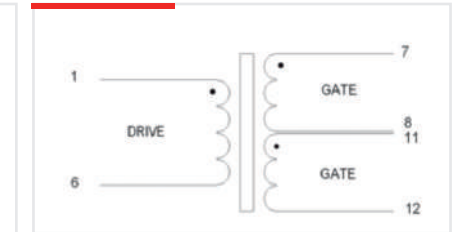
- › 150V $\mu$ s MAX ET product
- › Design for high performance EV/HEV onboard SMPS
- › Height : 7.8mm MAX, Pick & Place compatible
- › Footprint : SMD 18 x 14.5mm MAX
- › RMS current rating : up to 0.5Arms
- › 1:1+1 turn ratio for bridge control
- › Working frequency from 90 to 125kHz
- › 3kV isolation between primary and secondary
- › High operating temperature range -40 to +155°C
- › AOI (Automatic Optical Inspection) component
- › UL94V-0 and RoHS material
- › Design compliant with AEC-Q200 requirements
- › No thermal aging effect
- › Weight : less than 5g

### 02 SPECIFICATIONS

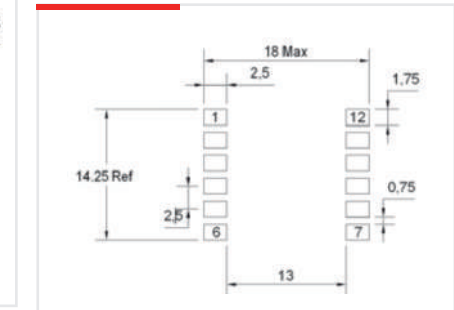
#### DIMENSIONS



#### ELECTRICAL DIAGRAM



#### RECOMMENDED PAD-LAYOUT



#### ELECTRICAL SPECIFICATIONS

<b>MAX ET Product (V<math>\mu</math>s)</b>	150
<b>Turn-Ratio</b>	1:1+1
<b>Primary Inductance (<math>\mu</math>H)</b>	400-800
<b>Secondary DCR MAX (m<math>\Omega</math>)</b>	0.8
<b>Primary DCR MAX (<math>\Omega</math>)</b>	0.5
<b>Primary to Secondary Isolation (kVdc)</b>	3

- › (1) All test data are referenced to 25°C ambient temperature
- › (2) The inductance value is measured at 100kHz/0.1Vac
- › (3) The isolation is tested at DC/2sec (1min for qualification) ;
- › (4) The creepage distance is guaranteed > 5mm
- › (5) Continuous operating temperature range must be within -40/+155°C (including self-heating of the part)
- › (6) Leakage inductance value is less than 2 $\mu$ H (viewed from primary side at 100kHz/0.1Vac)
- › (7) Inter-winding stray capacitance is less than 12pF (between prim shorted and sec shorted at 100kHz/0.1Vac)