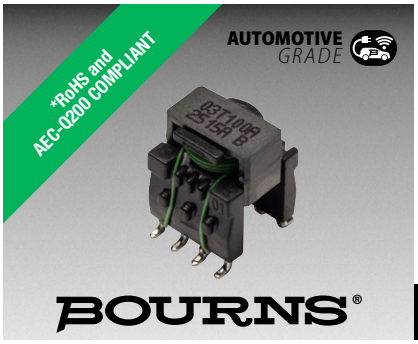


Features

- 3 watt gate driver transformer
- 300 kHz to 400 kHz switching frequencies
- High working voltage of 1000 V
- SMT transformer with 10 mm creepage
- Basic insulation per IEC 61558-2 & IEC 60664-1
- Operating temperature: -40 °C to +155 °C
- AEC-Q200 compliant & automotive grade

Applications

- Transistor gate drive power
- Inverter circuits
- Battery management systems
- Motor drives
- Power delivery

HVMA03T100A-ST10S Gate Driver Transformer

General Specifications

Operating Temperature (including self-temperature rise) ..... -40 °C to +155 °C
Level of Insulation ..... Basic Insulation
Creepage Distance (Primary to Secondary) ..... 10 mm
Clearance Distance (Primary to Secondary) ..... 6 mm
Storage Temperature ..... -40 °C to +85 °C
Moisture Sensitivity Level 1

Additional Information

Click these links for more information:

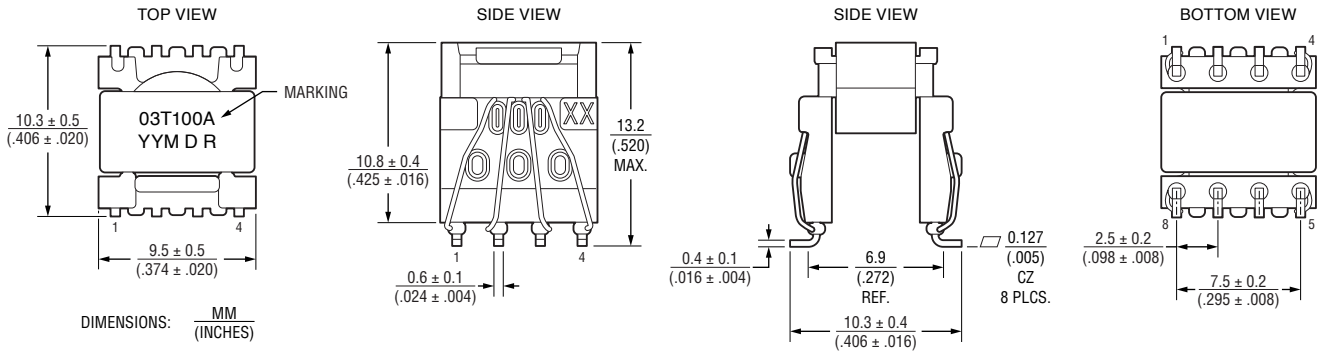
PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Electrical Specifications @ 25 °C

Bourns Part Number	Primary Inductance @ 100 kHz / 1 V (μH)		Leakage Inductance[1] (μH)		Turns Ratio		DCR max.		Hi-Pot: 2 sec. / 2 mA	Working Voltage
HVMA03T100A-ST10S	(3-1)	50 min.	(3-1)	1.0 max.	Pri : Sec1 : Sec2	1 : 2.5 : 0.65 ±5 %	(3-1)	560 mΩ	4000 V	1000
							(8-6)	1100 mΩ		
							(6-5)	380 mΩ		

NOTE: (1) Leakage inductance measured (3-1), shorted (5,6,8) @ 100 kHz, 1 V.

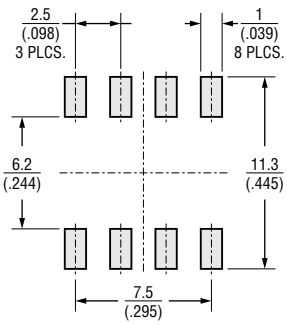
Product Dimensions



Materials

Bobbin ..... Phenolic
Wire ..... Fully Insulated Copper
Core ..... Ferrite
Glue ..... Epoxy

Recommended Layout



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

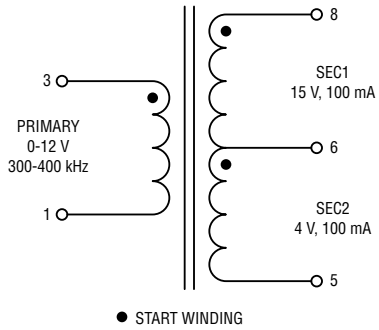
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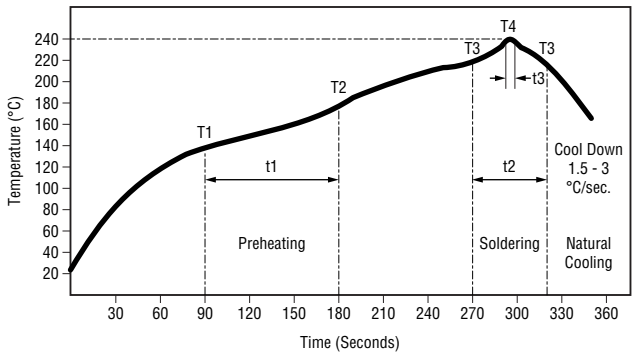
HVMA03T100A-ST10S Gate Driver Transformer

BOURNS®

Electrical Schematic



Lead-Free Soldering Profile



Preheating			Soldering		Peak	
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	T3	t2	T4	t3
140 °C	180 °C	60-120 sec.	220 °C	40-70 sec.	240-250 °C	5 sec.

How to Order

HVM A 03 T 100 A - ST 10 S

Model
HVM = Gate Driver and Flyback Transformer

Compliancy
A = Automotive Grade

Power Rating
03 = 3 W

Topology Type
T = Gate Driver and Flyback Transformer

Inductance Value
100 = 100 μH

Series
A = Series Number

Size Profile
ST = Standard ER9.5

Creepage
10 = 10 mm min.

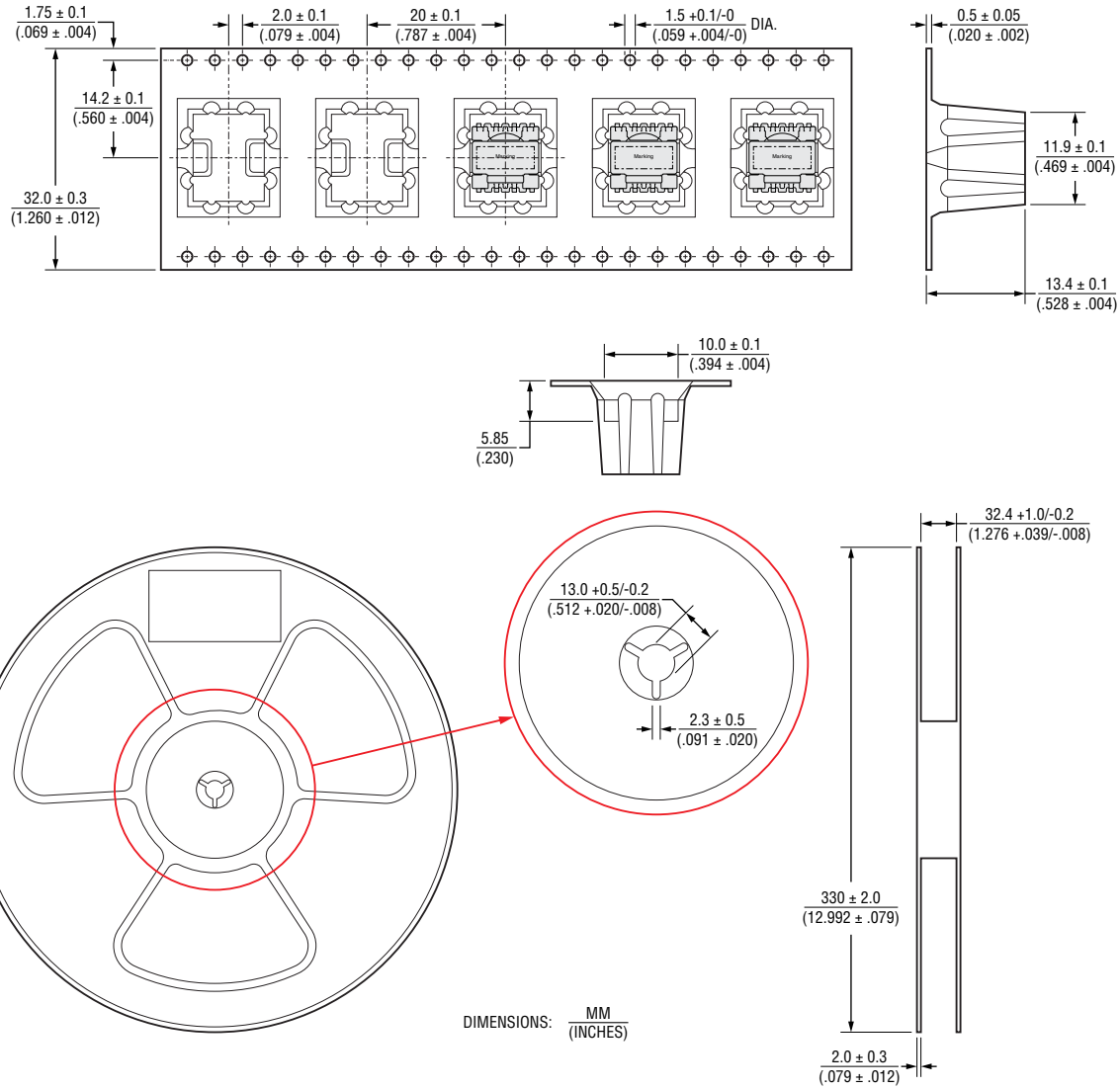
PCB Type
S = SMD

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Packaging Specifications

HVMA03T100A-ST10S: 230 pcs./reel, 5 reels/carton



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