

# Flyback Transformer for Automotive

Model name

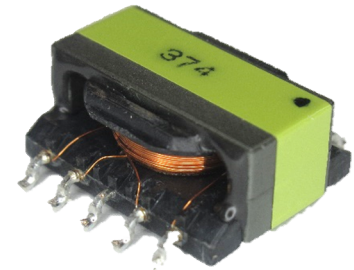
## TR14-A-S

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### FEATURES

- High voltage isolation
- Small size
- Operation temperature range : -40°C to 125°C
- Applicable for AEC-Q200

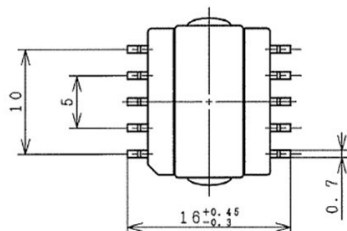
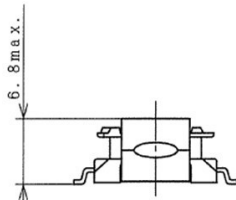
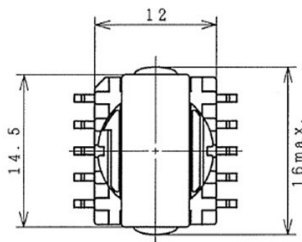


### APPLICATION

- For inverter module system.

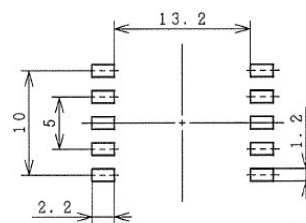
### DIMENSION

- Size (L x W x H) : 16.45mm x 16.0mm x 6.8mm (MAX)



Unit : mm / Tolerance : ±0.2

(Land Pattern)



Note.

Products in this catalog are subjected to any modification in their appearance and others for improvement purposes without prior notification. Please confirm your specification when using this product.

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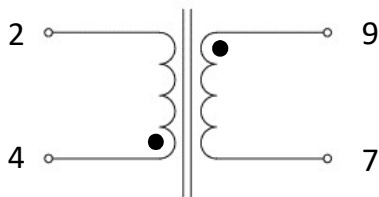
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### IC refernce information

- Power supply for IGBT gate driver IC
    - ▶ IC maker : Broadcom
    - ▶ IC model name : ACPL-33JT, ACFJ-3530T, ACFJ-3531T, ACFH-3548T
    - ▶ Mitsumi model name : TR14-A-S
    - ▶ Mitsumi sample number : DR12-C302
- \*The specifications of TR14-A-S can be changed to **TR14-A1-S** (automatic equipment version).  
\*The **TR14-A1-S** is same specification the TR14-A-S.

### SCHEMATIC



### ELECTRICAL CHARACTERISTIC

PARAMETER	TERMINALS	SPECIFICATION	CONDITION
INDUCTANCE	(2-4)	7.3μH±20%	f=100kHz
	(7-9)	120μH Typ.	f=100kHz
LEAKAGE INDUCTANCE	(2-4)	0.6μH Max.	f=100kHz
DCR	(2-4)	70mΩ Typ.	—
	(7-9)	320mΩ Typ.	—
URNS RATIO	Pri : Sec	1 : 4	—
WITHSTAND VOLTAGE	Pri : Sec	2.5kV	1 minute

\*Operation temperatuer range : -40°C to 125°C

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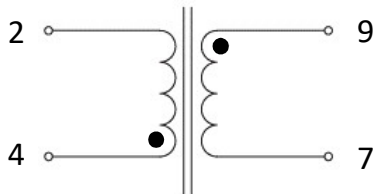
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- Power supply for IGBT gate driver IC
    - ▶ IC maker : Broadcom
    - ▶ IC model name : ACPL-33JT, ACFJ-3530T, ACFJ-3531T, ACFH-3548T
    - ▶ Mitsumi model name : TR14-A-S
    - ▶ Mitsumi sample number : DR12-C321
- \*The specifications of TR14-A-S can be changed to **TR14-A1-S** (automatic equipment version).  
\*The **TR14-A1-S** is same specification the TR14-A-S.

### SCHEMATIC



### ELECTRICAL CHARACTERISTIC

PARAMETER	TERMINALS	SPECIFICATION	CONDITION
INDUCTANCE	(2-4)	7.3 $\mu$ H $\pm$ 20%	f=100kHz
	(7-9)	120 $\mu$ H Typ.	f=100kHz
LEAKAGE INDUCTANCE	(2-4)	0.6 $\mu$ H Max.	f=100kHz
DCR	(2-4)	70m $\Omega$ Typ.	—
	(7-9)	1200m $\Omega$ Typ.	—
TURNS RATIO	Pri : Sec	1 : 4	—
WITHSTAND VOLTAGE	Pri : Sec	3.0kV	1 minute

\*Operation temperatuer range : -40°C to 125°C

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