# 10G Base-T LAN Transformer

### ALAN-516

#### **RoHS/RoHS II Compliant**



#### > FEATURES:

- Compliant with IEEE802.3 standard
- Compatible with top 10Gig PHY ICs
- ROHS peak reflow temperature rating: 245C
- Low profile package designed for PCI Express
- 1500Vrms Hi-pot

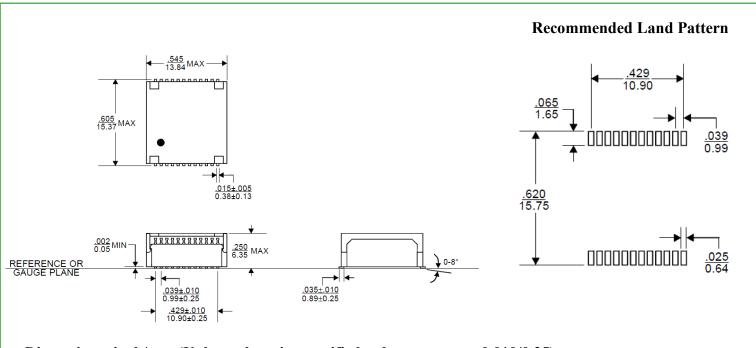
#### > APPLICATIONS:

- 10 Gigabit Ethernet
- · Hub, Router, Switch

#### > STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	0		+70	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio (±2%)		1CT: 1CT			Primary: Secondary
Inductance	100			uН	Primary@100KHz/0.1V
Insertion Loss		0.6	1.5	dB	1-500MHz
Return Loss	18			dB	1-40MHz
	17-10log(F/40)				40-500MHz
CM-DMRR	30			dB	1-250MHz
	22				250-500MHz
Crosstalk	40			dB	1-100MHz
	30				100-500MHz
High Pot	1500Vrms				Primary: Secondary
Polarity	Per Schematic				Primary: Secondary

#### **OUTLINE DIMENSIONS:**



Dimensions: inch/mm (Unless otherwise specified, tolerances are  $\pm$  0.010/0.25)

**Dimension: mm** 





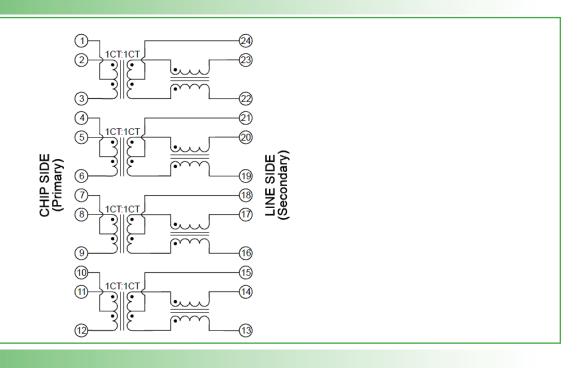
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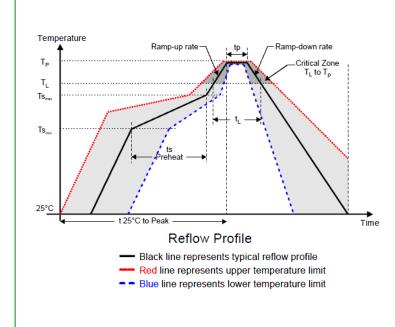
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#### **SCHEMATICS:**



#### **REFLOW PROFILE:**



Profile Feature	Pb-Free Assembly		
Average Ramp-Up Rate	3°C /second max.		
(Ts max to Tp)			
Preheat			
-Temperature Min (Ts min)	150°C		
-Temperature Max (Ts <sub>max</sub> )	200°C		
-Time (ts <sub>min</sub> to ts <sub>max</sub> )	60-180 seconds		
Time maintained above:			
-Temperature (T <sub>L</sub> )	217℃		
-Time (t <sub>L</sub> )	60-150 seconds		
Peak/Classification Temperature (Tp)	245+0/-5°C		
Time within 5°C of actual Peak	20-40 seconds		
Temperature (tp)			
Ramp-Down Rate	6°C /seconds max		
Time 25°C to Peak Temperature	8 minutes max.		





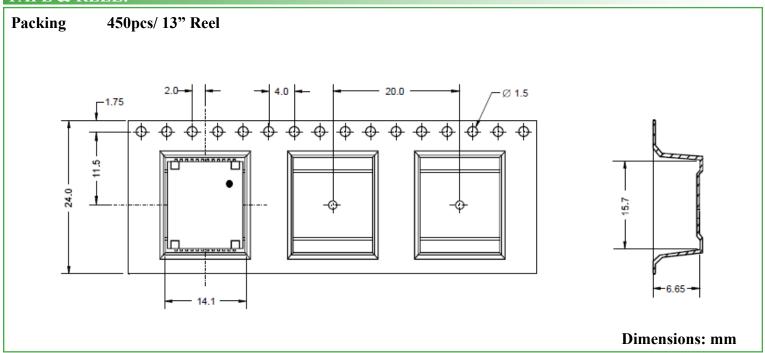
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#### ► TAPE & REEL:



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