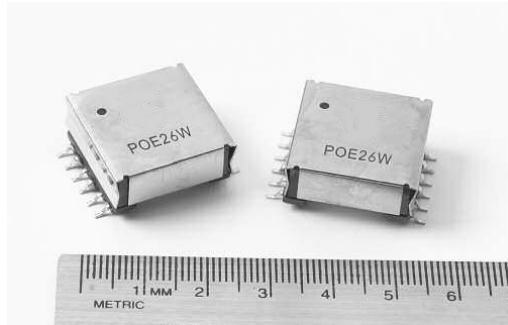


# Power Over Ethernet (PoE)/PD

## Configurable forward transformer



### Product features

- Versatile design allows multiple output variations
- Forward topology, 300 kHz switching frequency
- Input range from 29.5 V - 60.0 V
- 1500 Vac isolation between primary and secondary
- Power 26 watts
- Low leakage inductance

### Applications

- For IEEE 802.3af-compliant Power over Ethernet applications
- UPS, VoIP phone, Wireless LAN access point, Bluetooth access point, Network camera, Building access systems
- Retail Point-of-information systems
- Vending and gaming machines

### Environmental data

- Storage temperature range (component): -40 °C to +125 °C
- Operating temperature range: -40 °C to +125 °C (ambient plus self-temperature rise)
- Solder reflow temperature: J-STD-020 (latest revision) compliant



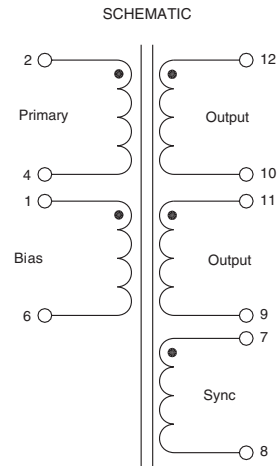
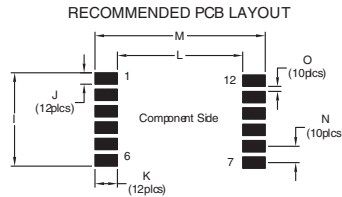
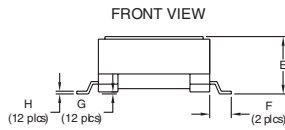
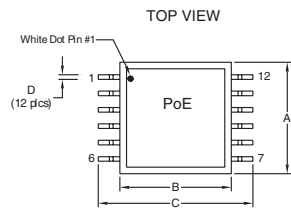
### Product specifications

Part Number	Watts	Primary Induct. (uH)	Output	Bias	Sync	DCR/ Pri (ohms) max	DCR/ Sec (ohms) max	DCR/ Bias (ohms) max	DCR/ Sync (ohms) max	Leakage Induct. (uh) typ.	Pri Current Pk (Adc)	Turns ratio pins Pri (2 - 4): V1 (12 - 10): V2 (11 - 9): Bias (1 - 6): Sync (7 - 8)
PoE26W3.3VS5-R	26	160	(2)x3.3V@4.0A	10.0V@0.1A	5V@0.1A	0.100	0.025	0.90	0.42	1.0	2.6	1:0.29:0.29:0.83:0.42 +/-2%
PoE26W3.3VS10-R	26	160	(2)x3.3V@4.0A	10.0V@0.1A	10V@0.1A	0.100	0.025	0.90	0.90	1.0	2.6	1:0.29:0.29:0.83:0.83 +/-2%
PoE26W5V-R	26	160	(2)x5.0V@2.6A	10.0V@0.1A	5.0V@0.1A	0.100	0.050	0.90	0.42	1.0	2.6	1:0.42:0.42:0.83:0.42 +/-2%

(1) Test parameters: 100 kHz, 0.100 Vrms, 0.0 Adc  
(2) DCR limits maximum @ +20 °C

(3) Leakage Inductance 300 kHz, 0.01 Vrms, 0.0 Adc

### Dimensions- mm



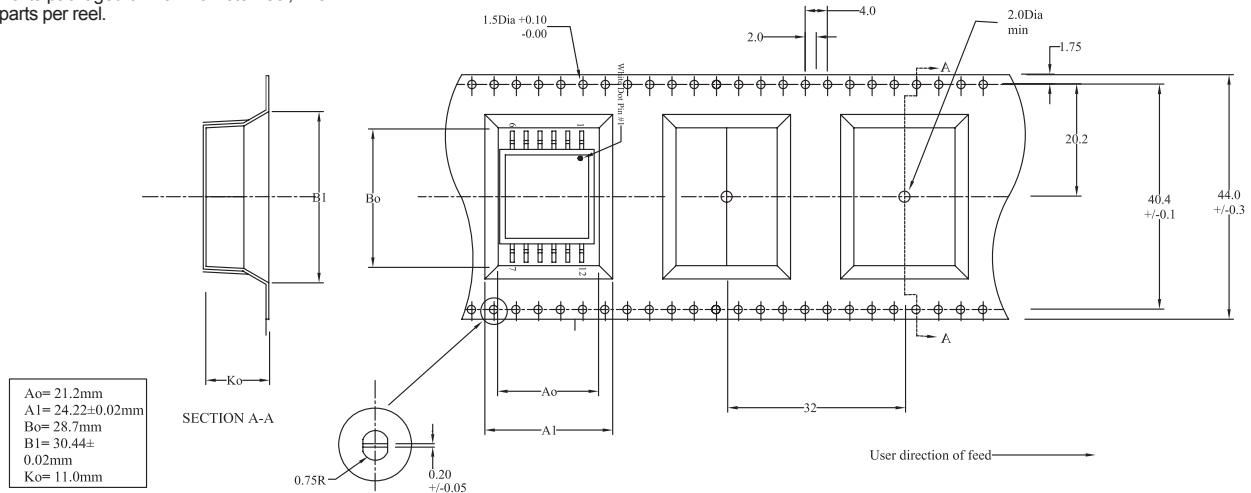
### DIMENSIONS

	A mm max.	B mm ref.	C mm max.	D mm ref.	E mm max.	F mm ref.	G mm ref.	H mm ref.	I mm ref.	J mm	K mm	L mm ref.	M mm max.	N mm	O mm
	21.5	22.0	28.5	0.7	10.8	2.95	0.1	0.4	17.25	2.25	3.15	23.2	29.5	3.0	0.75

- 1) Tolerances A - H are  $\pm 0.25$  mm unless specified otherwise.
- 2) Tolerances I - O are  $\pm 0.10$  mm unless specified otherwise
- 3) All soldering surfaces are coplanar to within  $\pm 0.102$  mm.
- 4) Do not rout traces or vias underneath the transformer

### Packaging information- mm

Parts packaged on 13" Diameter reel, 115 parts per reel.



### Solder Reflow Profile

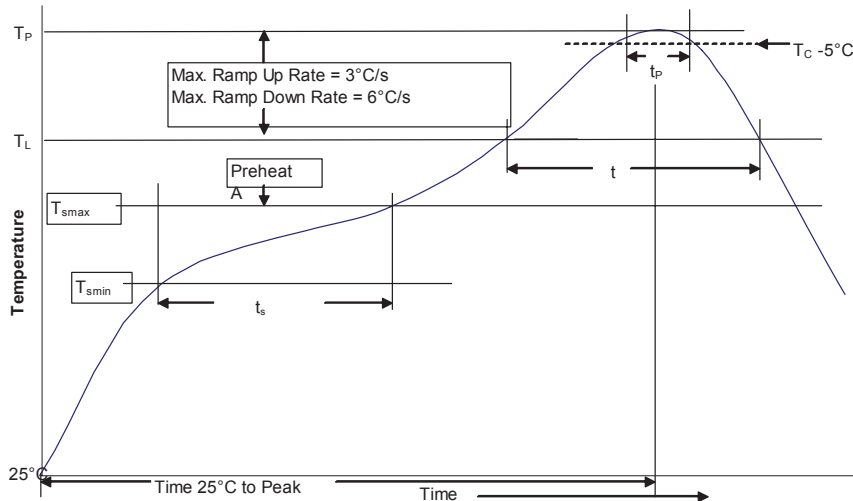


Table 1 - Standard SnPb Solder ( $T_C$ )

Package Thickness	Volume $\text{mm}^3$ <350	Volume $\text{mm}^3$ $\geq 350$
<2.5mm	235°C	220°C
$\geq 2.5\text{mm}$	220°C	220°C

Table 2 - Lead (Pb) Free Solder ( $T_C$ )

Package Thickness	Volume $\text{mm}^3$ <350	Volume $\text{mm}^3$ 350 - 2000	Volume $\text{mm}^3$ >2000
<1.6mm	260°C	260°C	260°C
1.6 - 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

### Reference JDEC J-STD-020

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. ( $T_{smin}$ )	100°C
	• Temperature max. ( $T_{smax}$ )	150°C
	• Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	60-120 Seconds
Average ramp up rate $T_{smax}$ to $T_P$	3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature ( $T_L$ )	183°C	217°C
Time at liquidous ( $t_L$ )	60-150 Seconds	60-150 Seconds
Peak package body temperature ( $T_P$ )*	Table 1	Table 2
Time ( $t_p$ )** within 5 °C of the specified classification temperature ( $T_C$ )	20 Seconds**	30 Seconds**
Average ramp-down rate ( $T_P$ to $T_{smax}$ )	6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature	6 Minutes Max.	8 Minutes Max.

\* Tolerance for peak profile temperature ( $T_P$ ) is defined as a supplier minimum and a user maximum.

\*\* Tolerance for time at peak profile temperature ( $t_p$ ) is defined as a supplier minimum and a user maximum.

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