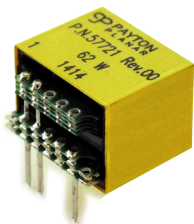


SIZE 25

Power Capacity 25 to 100W



Description

Payton SIZE 25 provides a planar solution for low power applications (such as telecommunication) providing high efficiency, low EMI, excellent repeatability, low profile and weight with an operating temperature range of -40°C to +130°C.

1. Transformer Application

POWER CAPACITY	DIMENSIONS (mm)	TYPICAL WEIGHT	DIELECTRIC ISOLATION	OPERATING VOLTAGE	OPERATING CURRENT (RMS)
25W, flyback at 200 kHz 100W, full bridge at 800 kHz	L=20-23 W=19 H=4-10	7-10 gr.	Up to 1000 Vrms	150 Vpeak max.	25 A max.

Typical efficiency: 97-99%

Recommended frequency range: 100 kHz – 2.5 MHz.

Topologies:

Full bridge; Half bridge; Push-Pull; Forward; Flyback; Boost; Buck; Resonant topologies (in order of preference).

Mounting Options: a. Horizontal, b. Vertical

2. Inductor Application

STANDARD A_L (nH/t ²)	1000	630	400	315	160	100
TYPICAL VALUE OF MAX. Amper Turns	4	12	23	29	60	97

A_L values not listed are available upon request.

3. Typical Thermal Impedance For Different Cooling Conditions

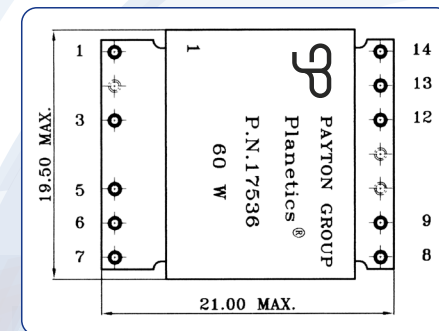
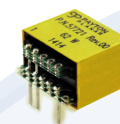
NATURAL COOLING (Hot Spot - Air)	BLOWING AIR 3m/sec (Hot Spot - Air)	ONE SIDE HEATSINK (Hot Spot - Heatsink)	TWO SIDES HEATSINK (Hot Spot - Heatsink)
40°C/W	25°C/W	15°C/W	8°C/W

Transformer Type T25 DC P.N. 17536

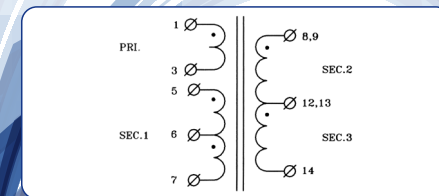
This T25-9-14C-6C, miniature planar transformer, natural cooled is developed for a low power DC-DC converter and may be used in telecommunication equipment, providing the following specifications:

Transformer Specifications

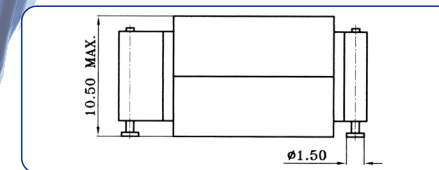
Total output power	60 W (± 12 Vdc@0.2 Adc; 5 Vdc@9 Adc; -5 Vdc@0.5 Adc)
Operating frequency	320 kHz
Input voltage range	36 - 72 Vdc
Topology	Forward
Max. Volt-Sec. product	49 V- μ Sec
Duty cycle	0.45 max.
Primary current	2.85 Arms max. 4.2 Arms max.
Primary to half Sec. 1 ratio	9 : 7
Primary to half Sec. 1 ratio	9 : 3
Primary to half Sec. 1 ratio	9 : 3
Dielectric strength	
pri. to sec.+core	1000 Vdc
sec. to core	500 Vdc
sec. to sec.	500 Vdc
Ambient temperature	-40°C to +85°C
Total losses (natural cooling)	1.2W
Hot spot temperature (natural cooling)	125°C max.
Weight	8 gr.



TOP VIEW



ELECTRICAL DIAGRAM



SIDE VIEW

(All dimensions are given in mm.)