

Common Mode Choke

Description

Payton **Common Mode Chokes** provides an effective, compact, planar solution for excellent suppressing common mode noise from switch mode power supplies lines. The components have very high repeatability, low profile and weight, low leakage flux, and high impedance at applicable frequency.



1. Physical Characteristics

DIMENSIONS (mm)	TYPICAL WEIGHT	OPERATING TEMPERATURE	TEMPERATURE SIZE	TERMINATION
L = 29 W = 27 H = 12	40 gr. max.	-40° - 85°C	40°C max.	SMT/TROUGH HOLES

2. Electrical Characteristics

Inductance range	300μH + 1000μH
Operating frequency	50kHz - 3MHz
Rated dc current range	4A - 300A
Peak current for 1 sec.	Up to 80A
Dc resistance range	3 - 18 mOhm
Dielectric with standing voltage (between windings)	500 Vrms
Leakage to nominal Inductance ratio	≤8.10 ⁻³ %
Interwinding capacitance range	200 pF - 700 pF

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 SIDE HEATSINK (Hot Spot - Heatsink)
22°/W	12°/W	7°/W	3.5°/W

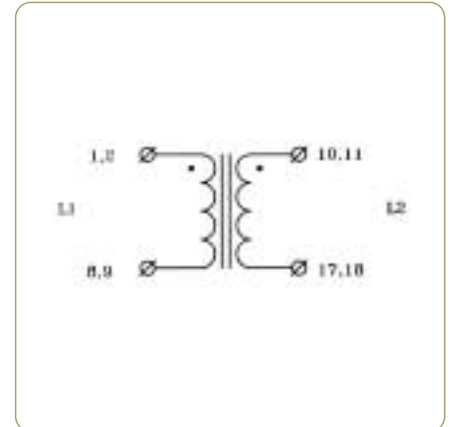
EXAMPLE

Common Mode Choke P.N. 100470

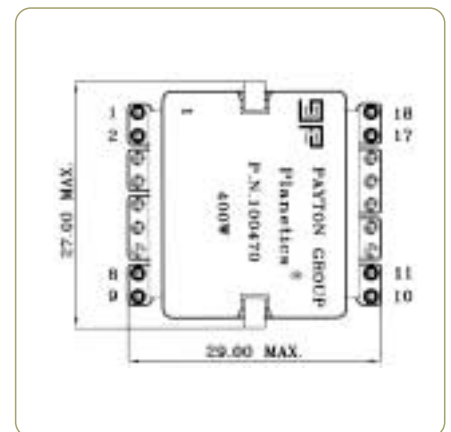
This I055-3-3 high inductance, high current, low leakage, high efficiency and small dimensions planar common mode choke is developed for suppressing common mode noise from switch mode power supplies lines, providing the following specifications:

Common Mode Choke Specifications

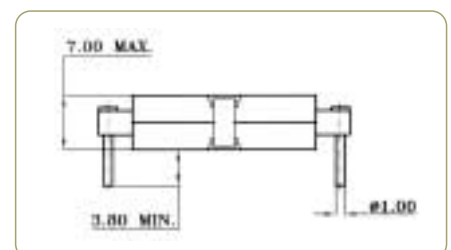
Inductance L1, L2	330 μ H \pm 30%
Rated DC Current	20A
Operating Frequency	300 kHz.
Peak Current for 1 sec.	60Adc
Dielectric strength (between L1+L2 to core)	500 Vrms
Power Losses (with 90°C heat sink)	2.7W
Ambient temperature range	-55°C to +90°C
Hot spot temperature (with 90°C heat sink)	115°C max.
Weight	20 gr.



ELECTRICAL DIAGRAM



TOP VIEW



SIDE VIEW

(All dimensions are given in mm.)