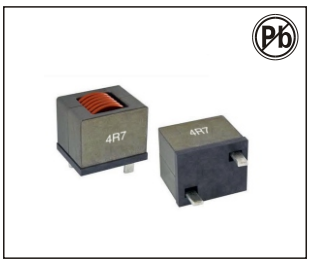
HIGH CURRENT THROUGH-HOLE INDUCTOR

DEP2520 SERIES



APPLCATIONS:

- High current and high temperature applications
- DC/DC converters
- High current motor and switching noise suppression
- Inverters

FEATURES:

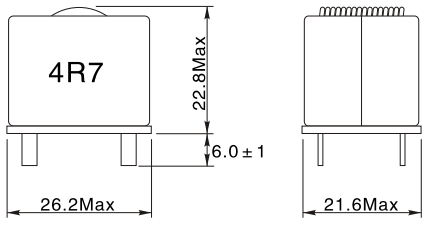
- High temperature operation, up to 180℃ continuous with no aging
- Low DCR to minimize losses and reduce temperature rise
- Powdered iron alloy core technology provides stable inductance and saturation over operating temperature with satisfactory core losses
- Soft saturation gives predictable inductance decrease with increasing DC current independent of temperature
- Standard terminal is stripped and tinned for through hole mounting but other terminal configurations such as bare copper, SMD, and press fit pin are available upon request
- Custom options are available

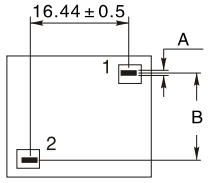
ELECTRICAL CHARACTERISTICS@25℃

Part Number	Inductance (uH) ±20% 100KHz,0.25V	DCR (mΩ)Max	SRF (MHz)Typ	Heat rating current Irms (A)	Saturation current Isat 1 (A)	Saturation current Isat 2 (A)
DEP2520-1R2M	1.2	0.30	90	80	110	150
DEP2520-2R2M	2.2	0.40	45	70	75	110
DEP2520-3R3M	3.3	0.70	25	50	60	90
DEP2520-4R7M	4.7	0.95	15	45	50	70
DEP2520-6R8M	6.8	1.15	10	40	45	60
DEP2520-8R2M	8.2	1.50	9	35	35	50
DEP2520-100M	10	2.00	8	30	30	45

TECHNICAL INFORMATION & WINDING

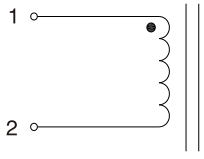
Dimensions(mm)





Part Number	A	B
DEP2520-1R2M	3.2	10.14
DEP2520-2R2M	2.5	10.84
DEP2520-3R3M	2.0	11.34
DEP2520-4R7M	1.8	11.54
DEP2520-6R8M	1.6	11.74
DEP2520-8R2M	1.4	11.94
DEP2520-100M	1.1	12.24

Winding



Note:
- All test data is referenced to 25℃ ambient
- Operating temperature range -40℃ to +180℃
- The part temperature (ambient + temp. rise) should not exceed 180℃ Cunder worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- Isolation voltage, coil to core: 350 VDC, 60s, 5 mA max.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately, △T=40℃ without core loss.
- Saturation Current (Isat 1) will cause L0 to drop approximately 20%
- Saturation Current (Isat 2) will cause L0 to drop approximately 30%

Note:All specifications subject to change without notice.