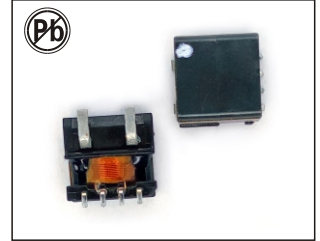


SMT CURRENT SENSE TRANSFORMERS

ACSTEP11 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Small SMD package
- RoHS compatible
- Qualified to AEC-Q200
- Insulation distances in compliance with IEC61558-2-16

APPLICATIONS:

- Switch-mode power supplies
- Feedback control
- Overload sensing
- Load drop/shut-down detection
- Switching current detection in on-board DC/DC converter and chargers

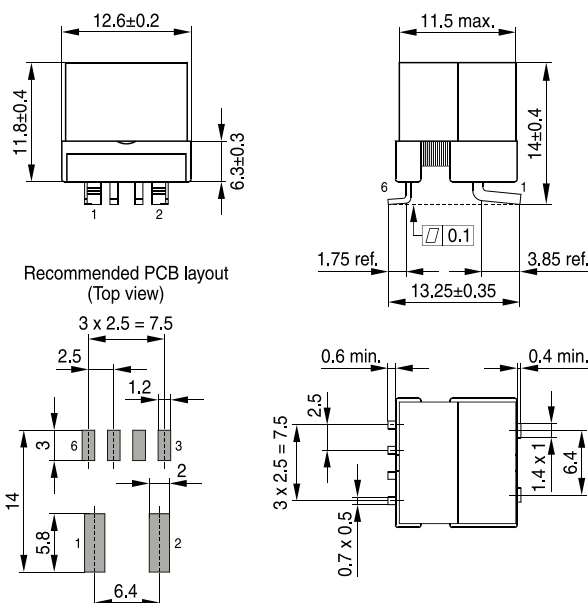
ELECTRICAL CHARACTERISTICS:

Part Number	Turns ratio	Inductance (mH) 20KHz,0.01V	Voltage-time product +120°C (V.us) (1)	Cp (pF) 10KHz,1V	R(1-2) (mΩ) Max	R(4-5) (Ω) Max	Rt (2) (Ω) Typ.
ACSTEP11-50	1:50	1.2 Min	117	4	0.5	1.5	1.6
ACSTEP11-70	1:70	2.8 Min	164	4	0.5	2.1	2.3
ACSTEP11-100	1:100	6.5 Min	235	4	0.5	3.1	3.3
ACSTEP11-125	1:125	7.5 Min	294	4	0.5	4.1	4.1
ACSTEP11-180	1:180	18.0 Min	423	4	0.5	7.4	6.0
Small air gap ensures tighter tolerance of inductance for better sensing accuracy							
ACSTEP11-100A	1:100	2.5 ± 12%	235	4	0.5	3.1	3.3

Notes:

- (1)The maximum volt-second rating limits the peak flux density to 220 mT when used in an unipolar drive application. For bipolar drive applications, a maximum volt-sec of two times is acceptable.
- (2)Burden Resistor value is calculated by taking Vout as 1 V reference and with maximum input current flowing through the input (30 A).

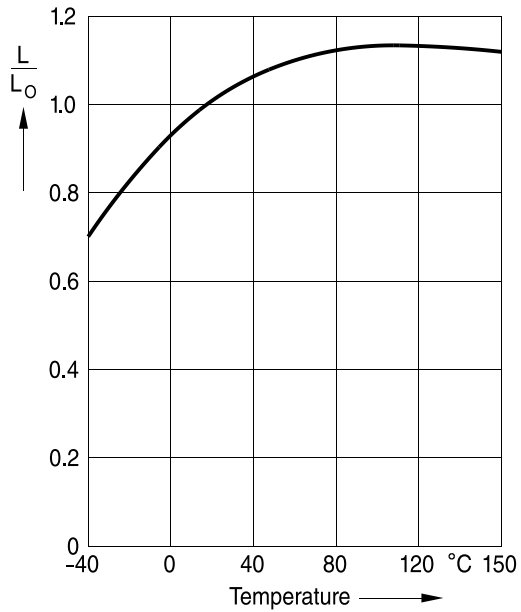
PHYSICAL CHARACTERISTICS & WINDING



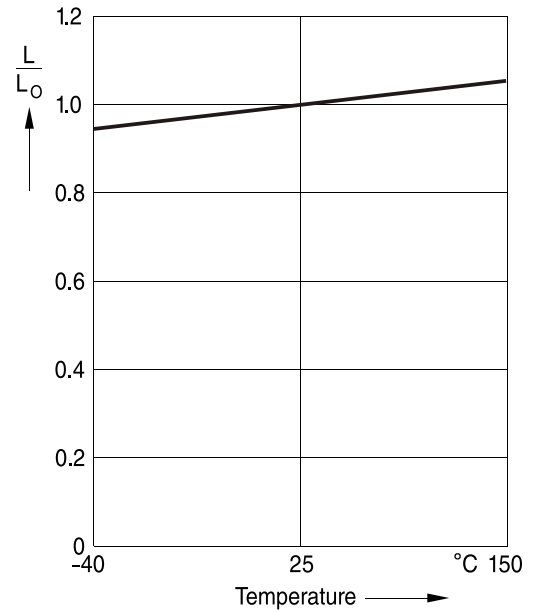
- Typical frequency range: 50~400KHz
- Inductance test frequency: 20KHz,0.01V
- High voltage test: 2500VAC,50Hz,1s (Pri to Sec, Core)
- The primary current of 30A causes approx +40°C temperature rise
- Couple capacitance measured at 10kHz, 1V, +25°C
- Operating temperature range -40°C to +150°C

INDUCTANCE L AS A FUNCTION OF TEMPERATURE TYPICAL CURVES

Parts without air gap according
N(4-5) L/Lo vs. Temperature



Parts with air gap according
N(4-5) L/Lo vs. Temperature



TAPING AND PACKING

