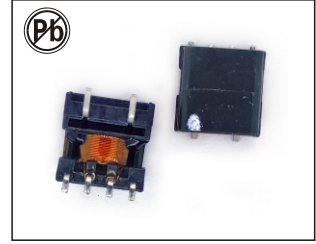


SMT CURRENT SENSE TRANSFORMERS

ACSTEP7 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Small SMD package
- RoHS compatible
- Insulation distances in compliance with IEC 60664

APPLICATIONS:

- Switch-mode power supplies
- Feedback control
- Overload sensing
- Load drop/shut-down detection

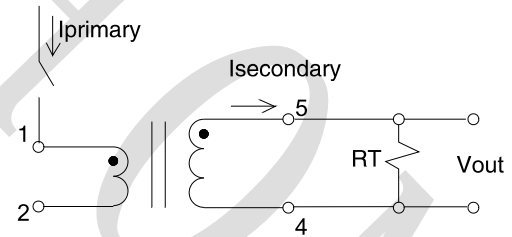
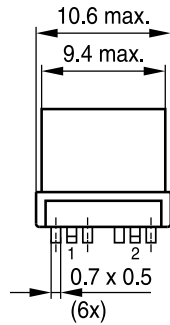
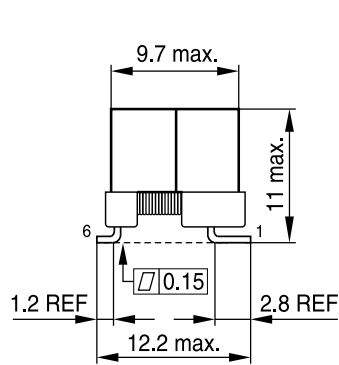
ELECTRICAL CHARACTERISTICS:

Part Number	Turns	Inductance (mH) Min	Voltage-time product +120°C (V.us) (1)	Cp (pF)	R(1-2) (mΩ) Max	R(4-5) (Ω) Max	Rt ⁽²⁾ (Ω) Typ.
ACSTEP7-50	50	1.7	116	4	1.9	2.1	2.5
ACSTEP7-70	70	3.0	163	4	1.9	2.9	3.5
ACSTEP7-100	100	7.0	233	4	1.9	5.0	5.0
ACSTEP7-125	125	11.0	291	4	1.9	5.3	6.0

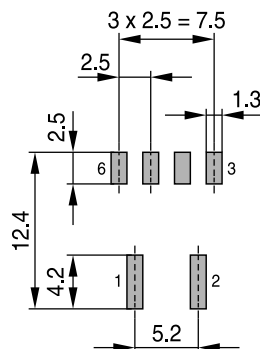
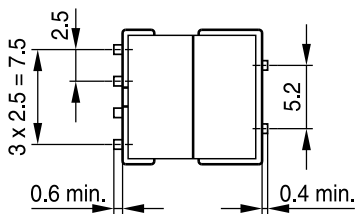
Notes:

- (1)The maximum volt-second rating limits the peak flux density to 220 mT when used in a 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 (20 A) flowing through the primary winding of the current sense transformer

PHYSICAL CHARACTERISTICS & WINDING



Recommended PCB layout (Top view)



- Typical frequency range: 50~250KHz
- Inductance test frequency: 20KHz, 0.01V
- High voltage test: 2400VAC, 50Hz, 1s (Coil to Coil)
- The max primary current of 20A causes approx +40°C temperature rise
- Couple capacitance measured at 10kHz, 1V, +25°C
- Operating temperature range -40°C to +150°C