



TITLE

## OCTAL T1/E1 TRANSFORMER

PN

37543

REV

F

AGENCY APPROVAL: NA

SH

2

OF

12

## SPECIFICATIONS

EXTENDED TEMP RANGE (-40C TO +85C)

## 1. TURNS RATIO:

RECEIVE (IN+ TO IN-) : (OUT+ TO OUT-)

1 : 2CT  $\pm 2\%$ 

TRANSMIT(1-2):(39-40):(38-40):(6-7)

1 : 1:1.26CT  $\pm 2\%$ 

(34-35):(33-35):(11-12):(29-30)

(28-30):(16-17):(24-25):(23-25)

## 2. INDUCTANCE:

TRANSMIT (IN+ TO IN-)

1.2 mH MIN. @ 0.01V. 100KHz . 25C

RECEIVE (IN+ TO IN-)

1.2 mH MIN. @ 0.01V. 100KHz . 25C

TRANSMIT (IN+ TO IN-)

600 uH MIN. @ 0.01V. 100KHz . -40C TO +85C

RECEIVE (IN+ TO IN-)

600 uH MIN. @ 0.01V. 100KHz . -40C TO +85C

## 3. LEAKAGE INDUCTANCE:

TRANSMIT IN+ TO IN-

0.5uH MAX. @ 1MHz

(WITH OUT+ AND OUT- SHORT)

RECEIVE IN+ TO IN-

0.5uH MAX. @ 1MHz

(WITH OUT+ AND OUT- SHORT)

## 4. INTERWINDING CAPACITANCE:

(IN+, IN-) TO (OUT+, OUT-)

35pf MAX @ 1MHz

## 5. D.C. RESISTANCE:

TRANSMIT (IN+ TO IN-) RECEIVE (IN+ TO IN-)

0.6 ohms Max.

TRANSMIT( OUT + TO OUT -)

0.8 ohms Max.

RECEIVE( OUT + TO OUT -)

1.2 ohms Max

## 6. DIELECTRICAL VOLTAGE WITHSTAND:

(IN+, IN-) TO (OUT+, OUT-)

1500VAC for 60 seconds

(1800VAC for 1 second production test)

## 7. RETURN LOSS: WINDING WITH A TURNS RATIO 1, 1.26 AND 2 IS 100 OHM REF.)

(25 OHMS CONNECTED TO THE LOW TURNS SIDE OF 2 RATIO TRANSFORMER)

(100 OHMS CONNECTED TO THE LOW TURNS SIDE OF 1 RATIO TRANSFORMER)

(63 OHMS CONNECTED TO THE LOW TURNS SIDE OF 1.26 RATIO TRANSFORMER)

51KHz TO 102KHz

12dB MIN

102KHz TO 2.048MHz

18dB MIN

2.048MHz TO 3.072 MHz

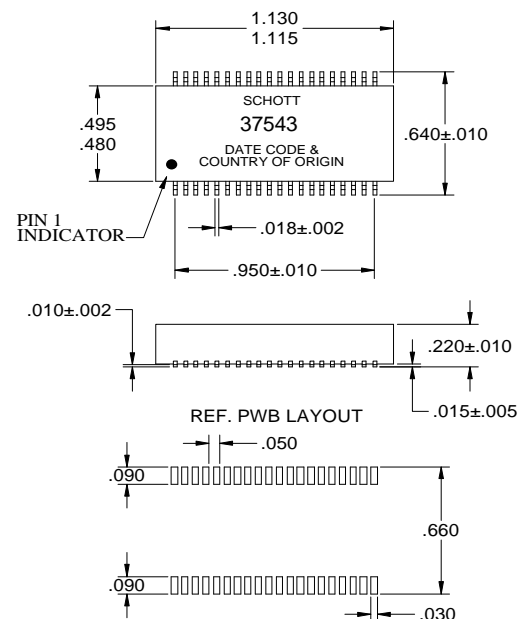
14dB MIN

## 8. CROSS TALK:

65dB OR BETTER

## 9. COMMON MODE REJECTION:

50dB OR BETTER @ 1MHz

DIMENSIONAL  
OUTLINE

COPLANARITY OF PINS IS LESS THEN OR EQUAL TO 0.004 INCHES

## SCHEMATIC

