For ISDN S/T Interface Transformers
SMD, PC Card, Pin Terminal

CIT-S Series

FEATURES

- SMD, pin-terminated, and PC Card (PCMCIA, Type I) types are available for various application ICs.
- There is no flow of unbalanced current during phantom feeding.
- Low-profile design makes it possible to offer these parts in tape and reel packaging.
- The wire terminations and soldering terminals are physically separated. This prevents wire breakage or pin lifting during the mounting/soldering process.
- Any automated mounting machine of either the mechanical centering or optical centering type can be used.
- Supports reflow soldering.

APPLICATIONS

- Digital terminal equipment in ISDN (TE1: telephone, facsimile, etc.)
- Digital PBXs in ISDN (TE2)
- Terminal adapters (TA)
- Interface boards (TA)

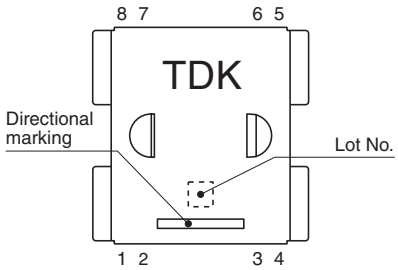
TRANSFORMERS APPLICABLE FOR IC

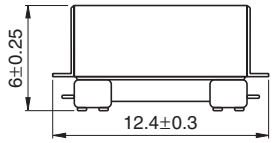
IC makers' name	IC part No.	Turns ratio	TDK part No.
AMD	AM79C30	1 : 2	CIT1212EMS-S20 (SMD type) CIT1311S-S20 (PC card type) CIT1414EPC-S20-02 (Pin type)
MITEL	MT8930	1 : 2	
N.S.	TP3420	1 : 2	
SIEMENS	PEB2080 PEB2085	1 : 2	
TOSHIBA	TA32031F TA32032F	1 : 2	
YAMAHA	YM7303	1 : 2	
MOTOROLA	MC145474 MC145475	1 : 1	CIT1212EMS-S10 (SMD type) CIT1311S-S20 (PC card type) CIT1414EPC-S10 (Pin type)
NEC	µPD98201 µPD98205 [Receiver]	1 : 1	CIT1212EMS-S10 (SMD type) CIT1311S-S20 (PC card type) CIT1414EPC-S10 (Pin type)
	µPD98201 µPD98205 [Transmitter]	1 : 2	CIT1212EMS-S20 (SMD type) CIT1311S-S20 (PC card type) CIT1414EPC-S20-02 (Pin type)
FUJITSU	MB86405 [Receiver]	1 : 1.5	CIT1212EMS-S15 (SMD type) CIT1311S-S20 (PC card type) CIT1414EPC-S15 (Pin type)
	MB86405 [Transmitter]	1 : 2	CIT1212EMS-S20 (SMD type) CIT1311S-S20 (PC card type) CIT1414EPC-S20-02 (Pin type)

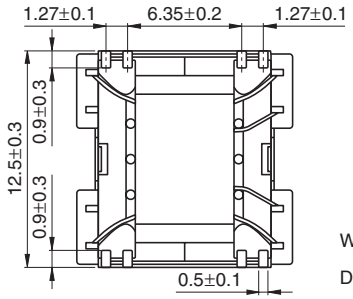
- Company and product names are registered trademarks.

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

SMD TYPE CIT1212EMS-S20, -S15, -S10

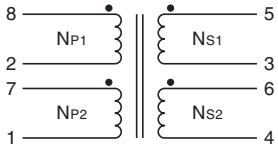






Weight: 2g

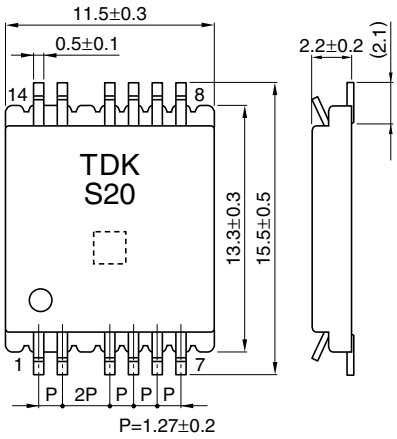
Dimensions in mm



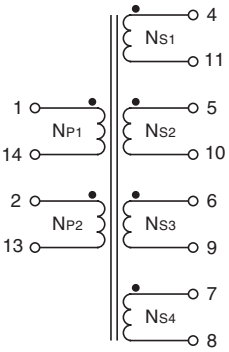
Turns ratio
N_{P1}:N_{P2}:N_{S1}:N_{S2}=1:1:2:2(-S20)
N_{P1}:N_{P2}:N_{S1}:N_{S2}=1:1:1.5:1.5(-S15)
N_{P1}:N_{P2}:N_{S1}:N_{S2}=1:1:1:1(-S10)
Line side: N_{P1}, N_{P2}
IC side: N_{S1}, N_{S2}

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAMS

PC CARD TYPE CIT1311S-S20

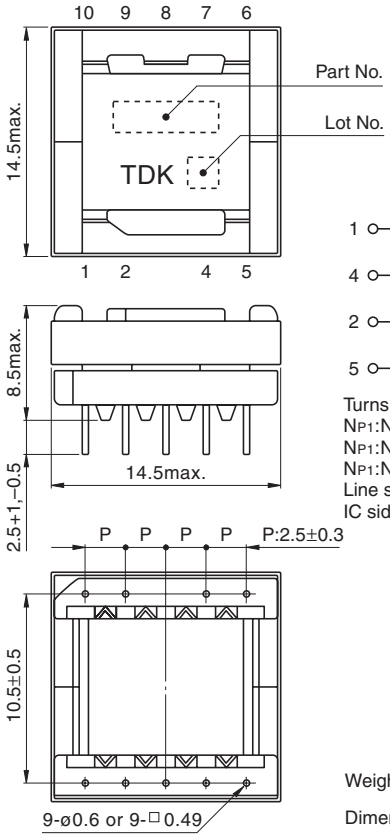


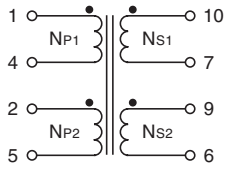
Weight: 0.7g



Turns ratio
N_{P1}:N_{P2}:N_{S1}:N_{S2}:N_{S3}:N_{S4}
=1:1:1:1:1:1
Line side: N_{P1}, N_{P2}
IC side: N_{S1}, N_{S2}, N_{S3}, N_{S4}

PIN TYPE CIT1414EPC-S10, -S15, -S20-02





Turns ratio
N_{P1}:N_{P2}:N_{S1}:N_{S2}=1:1:1:1(-S10)
N_{P1}:N_{P2}:N_{S1}:N_{S2}=1:1:1.5:1.5(-S15)
N_{P1}:N_{P2}:N_{S1}:N_{S2}=1:1:2:2(-S20-02)
Line side: N_{P1}, N_{P2}
IC side: N_{S1}, N_{S2}

Weight: 3g

Dimensions in mm

ELECTRICAL CHARACTERISTICS

Part No.	Impedance(Ω)min. [Erms: 0.1V]				Inductance (mH)min. [10kHz, Erms: 0.1V]	Leakage inductance (μH)max. [100kHz, Erms:0.1V]	DC resistance (Ω)max.		Withstand voltage Eac(V) [1min]
	2kHz	20kHz	106kHz	1MHz			Primary [Line]	Secondary [IC]	
CIT1212EMS-S10	250	2.5k	4.48k	475	20	15	11	11	500
CIT1212EMS-S15	250	2.5k	4.74k	503	20	15	11	16	500
CIT1212EMS-S20	250	2.5k	5.17k	528	20	15	11	20	500
CIT1311S-S20	250	2.5k	5.17k	528	20	1.5	5.3	10.6	500
CIT1414EPC-S10	250	2.5k	4.48k	475	20	10	3.5	3.5	1.5k
CIT1414EPC-S15	250	2.5k	4.74k	503	10	10	3.5	5.4	1.5k
CIT1414EPC-S20-02	250	2.5k	5.17k	528	20	10	3.5	7.2	1.5k