

**TRANSFORMER  
(T3/DS3/E3/STS-1)**

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# 15T SERIES

## T3/DS3/E3/STS-1 TRANSFORMERS Designed for T3, DS3, and STS-1 Interfaces

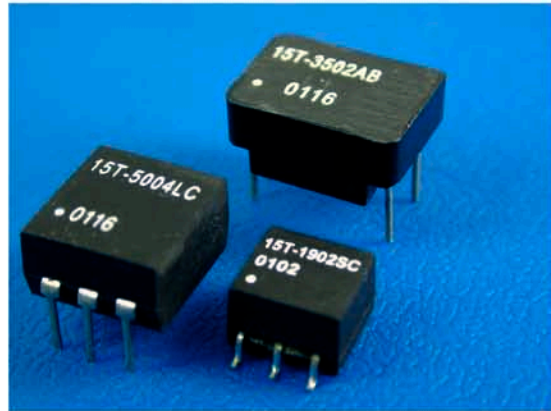
### FEATURES

- Return loss meets requirements
- Fast rise time compatible with standards
- Through hole and surface mount packages available
- Models with 1500Vrms isolation and 3000Vrms reinforced insulation per BAPT EN41003/EN60950

### TEST CONDITIONS

- Inductance ----- 100KHZ/100mV
- Leakage Inductance ----- 100KHZ/100mV
- Interwinding Capacitance-- 100KHZ/100mV

### ELECTRICAL SPECIFICATIONS @25°C



Part Number	Turns Ratio (±2%)	OCL. Primary (uH MIN.)	OCL AT -40°C (uH MIN)	LL (uH MAX)	CW/W (pF MAX)	Isolation Voltage (Vrms MIN)	Package Schematic	Primary Pins
15T-3502TB	1:2CT	35	20	0.12	10	1500	T/B SMT	2-6
15T-4501TA	1:1	45	30	0.12	13	1500	T/A SMT	2-6
15T-4001QA	1:1	40	30	0.12	13	1500	Q/A THT	2-6
15T-3502QB	1:2CT	35	20	0.12	10	1500	Q/B THT	2-6
15T-1513QB	1:4CT	150	-	0.30	15	1500	Q/B THT	2-6
15T-5004LC	1:1.73CT	50	-	0.10	12	1500	L/C THT	4-6
15T-4001LE	1:1	40	-	0.10	10	1500	L/E THT	4-6
15T-4001SE	1:1	40	-	0.10	10	1500	S/E SMT	4-6
15T-1902SC	1:2CT	19	-	0.06	10	1500	S/C SMT	4-6
15T-1902LC	1:2CT	19	-	0.06	10	1500	L/C THT	4-6
15T-4001HA	1:1	40	-	0.10	5	3000	H/A THT	1-5
15T-1902HD	1:2CT	19	-	0.06	10	3000	H/D THT	1-5

### ELECTRICAL SPECIFICATIONS @25°C—Operating Temperature -40°C to +85°C

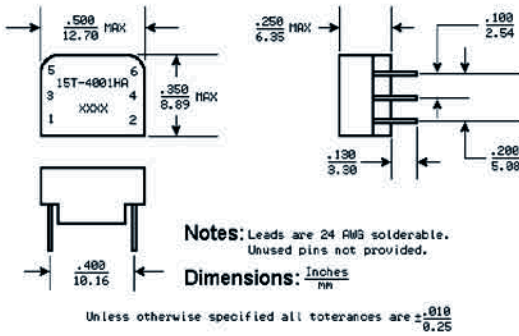
Part Number	Turns Ratio (±2%)	OCL. Primary (uH MIN.)	OCL AT -40°C (uH MIN)	LL (uH MAX)	CW/W (pF MAX)	Isolation Voltage (Vrms MIN)	Package Schematic	Primary Pins
15T-1011XE	1:1	100	40	0.110	10	1500	X/E SMT	1-3
15T-4002XC	1:2CT	40	19	0.110	12	1500	X/C SMT	4-6
15T-1011SE	1:1	100	40	0.110	10	1500	S/E SMT	4-6
15T-4002SC	1:2CT	40	19	0.110	12	1500	S/C SMT	4-6
15T-4003XF	1CT:1CT	40	19	0.100	10	1500	X/F SMT	1-3
15T-4004XC	1:1.155CT	40	20	0.150	12	1500	X/C SMT	4-6

### ELECTRICAL SPECIFICATIONS @25°C

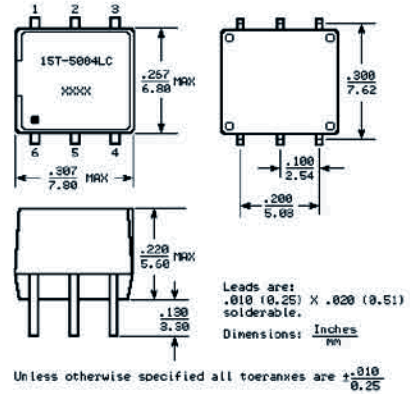
Part Number	Turns Ratio (±5%)	OCL Primary (mH MIN.)	CW/W PF MAX	LL uH MAX	DCR Pri (Ω MAX)	DCR Sec (Ω MAX)	Isolation Voltage (Vrms MIN)	Package Schematic	Primary Pins
15T-1221HC	1:1	1.20	25	0.50	0.70	0.70	1500	H/C THT	1-2

### Mechanicals

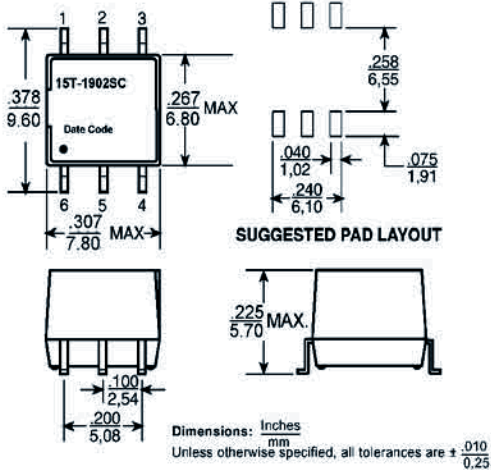
**H**



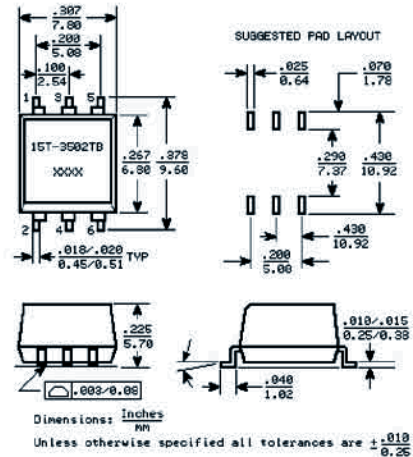
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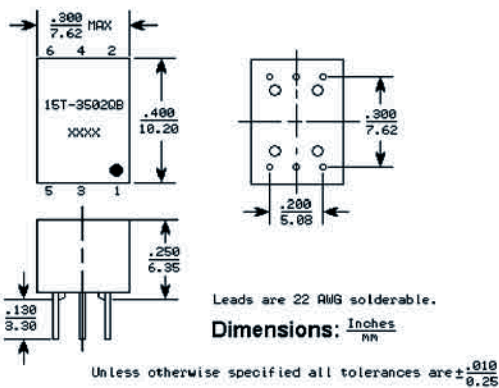
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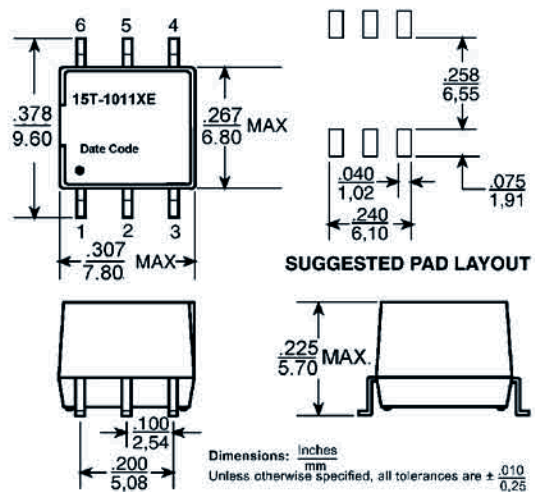
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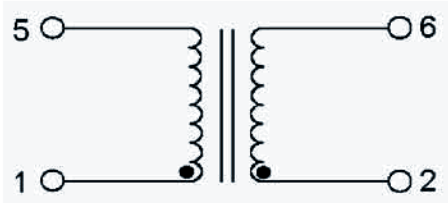
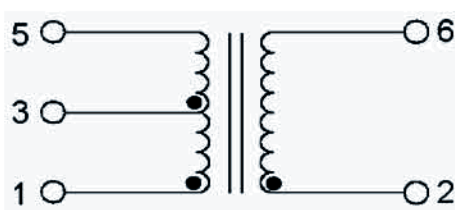
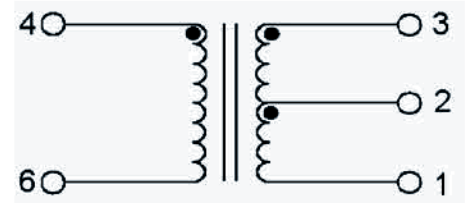
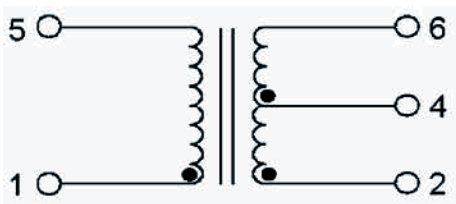
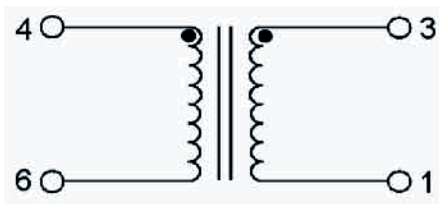
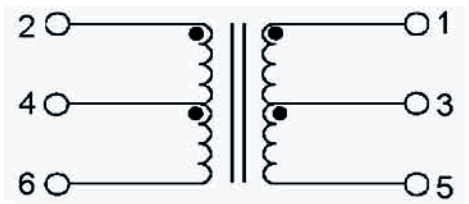
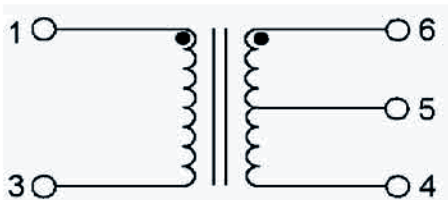
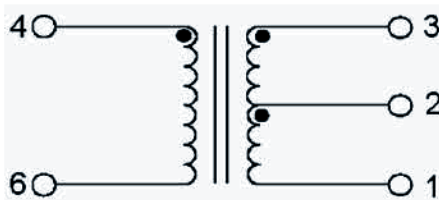
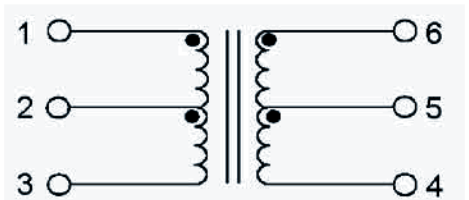


**Q**



**X**



**Schematics****A****B****C****D****E****F****K****L****M**

# MMI 15T-DUAL SERIES

## T3/DS3/E3/STS-1 TRANSFORMERS

Dual SMT, Extended Temperature Range

### FEATURES

- Dual SMT package contains both transmit and receive transformers
- Operating temperature of -40°C to +85°C
- Models matched to leading transceiver ICs
- Return loss meets requirements of G.703

### TEST CONDITIONS

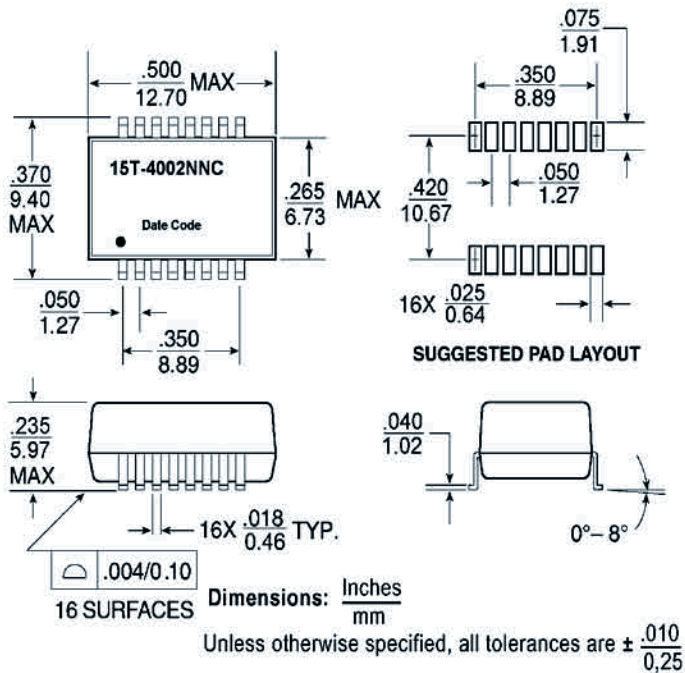
- Inductance ----- 100KHZ/100mV
- Leakage Inductance ----- 100KHZ/100mV
- Interwinding Capacitance-- 100KHZ/100mV



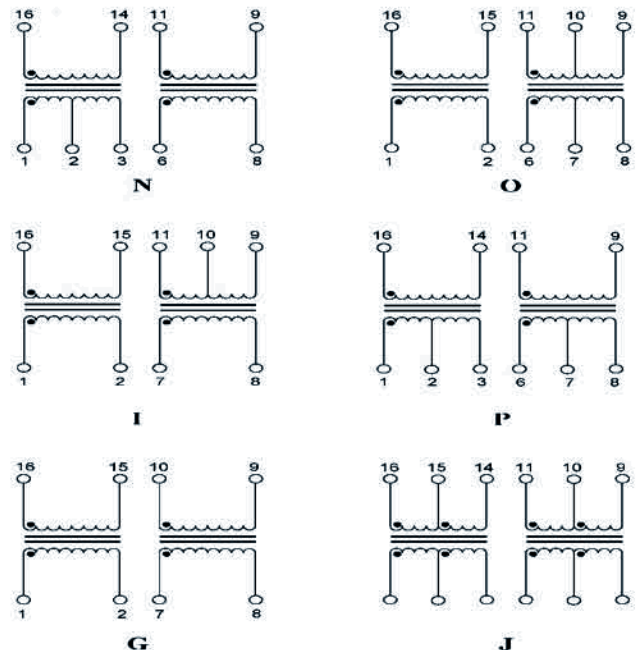
### ELECTRICAL SPECIFICATIONS @25°C - Operating Temperature -40°C to +85°C

Part Number	Turns Ratio (±2%)		OCL. Primary (uH MIN.)		LL (uH MAX)		CW/W (pF MAX)		Isolation Voltage (Vrms MIN) 1500	Package/ Schematic	Primary Pins	
	TX	RX	TX	RX	TX	RX	TX	RX			TX	RX
15T-4002NNC	1:2CT	1:1	40	100	.120	.120	10	10	1500	N/N	16-14	6-8
15T-4003NPC	1:2CT	1:2CT	40	40	.100	.100	10	10	1500	N/P	16-14	11-9
15T-4003NGC	1:1	1:1	40	40	.110	.110	10	10	1500	N/G	1-2	7-8
15T-1014NOC	1CT:1CT	1:1	100	100	.120	.120	10	10	1500	N/O	6-8	16-15
15T-1012NIC	1:2CT	1:1	100	100	.120	.120	10	10	1500	N/I	7-8	16-15

### Mechanicals



### Schematics



# MMI 15T-1 SERIES

## T3/DS3/E3/STS-1 TRANSFORMERS

Designed for T3, DS3, E3 and STS-1 Interface

### FEATURES

- Return loss meets requirements
- Six and eight transformers in a surface mount package
- Isolation voltage: 1500Vrms

### TEST CONDITIONS

- Inductance ----- 100KHZ/100mV
- Leakage Inductance ----- 100KHZ/100mV
- Interwinding Capacitance-- 100KHZ/100mV



### ELECTRICAL SPECIFICATIONS @25°C

Part Number	Turns Ratio (±2%)	OCL. Primary (uH MIN.)	OCL AT -40°C (uH MIN)	LL (uH MAX)	CW/W (pF MAX)	Isolation Voltage (Vrms MIN)	Package Schematic	Primary Pins
15T-4001RN	1:1	40	-	0.150	10	1500	R/N	1-2,3-4,5-6,7-8 9-10,11-12,13-14, 15-16
15T-1902RN	1:2	19	-	0.150	10	1500	R/N	1-2,3-4,5-6,7-8 9-10,11-12,13-14, 15-16

### ELECTRICAL SPECIFICATIONS @25°C—Operating Temperature -40°C to +85°C

Part Number	Turns Ratio (±2%)	OCL. Primary (uH MIN.)	OCL AT -40°C (uH MIN)	LL (uH MAX)	CW/W (pF MAX)	Isolation Voltage (Vrms MIN)	Package Schematic	Primary Pins
15T-1011YQC	1:1	100	40	0.110	10	1500	Y/Q	1-2,3-4,5-6,7-8 9-10,11-12
15T-1011RNC	1:1	100	-	0.150	10	1500	RN	1-2,3-4,5-6,7-8 9-10,11-12,13-14, 15-16
15T-1012RNC	1:1 & 1:2	100 & 40	-	0.120	10	1500	R/N	1-2,5-6,9-10,13-14 & 3-4,7-8,11-12,15-16

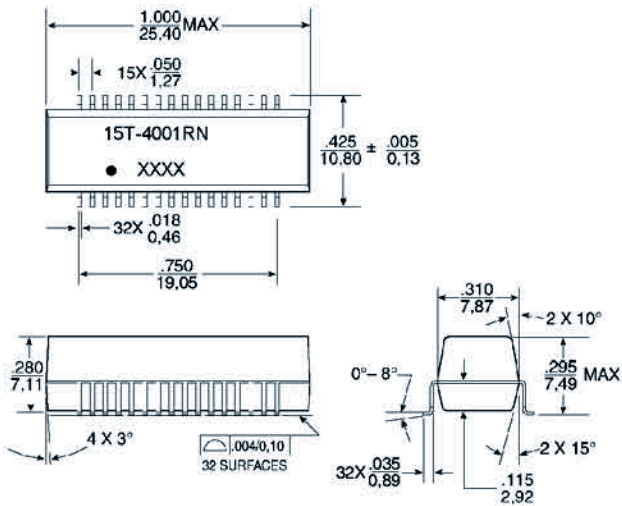
# MMI 15T-1 SERIES

## T3/DS3/E3/STS-1 TRANSFORMERS

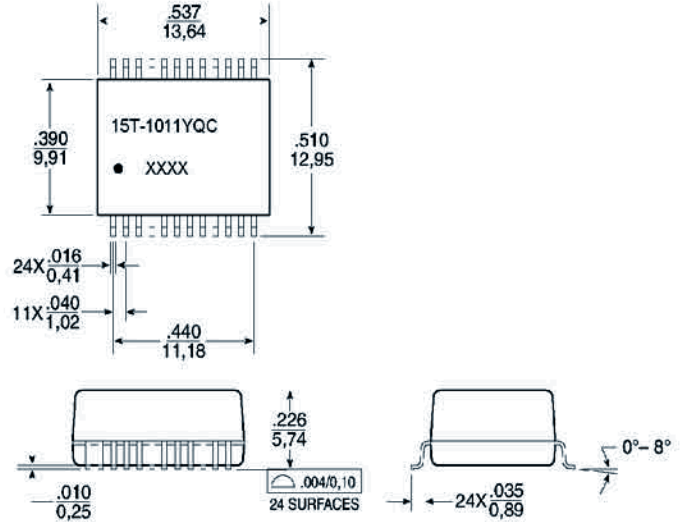
Designed for T3, DS3, E3 and STS-1 Interface

### MECHANICAL

R



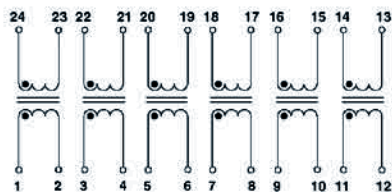
Y



Dimensions: inch/mm all tolerances are ± .010/± 0,25

### SCHEMATICS

Q



N

