



## TRJ Series • Pulse Transformers for RF Applications

These miniature transformers are suitable for pulse applications requiring a very fast rise time and for 50 ohm wideband RF

### Features

- SMD styles are pick and place compatible and provide consistent and reliable coplanarity
- EMI noise suppression in the common mode
- low leakage inductance
- excellent quality at extremely competitive price due to high volume production
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Fully RoHS compliant and meets lead free reflow level J-STD-020C



### Electrical Specifications @ 25°C

Power Rating : 250mW

Dielectric Strength between windings: 700Vrms

Operating Temperature Range: -40°C to +85°C

Storage Temperature: -40°C to +125°C

Insulation Resistance: 10,000 MOhm minimum

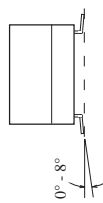
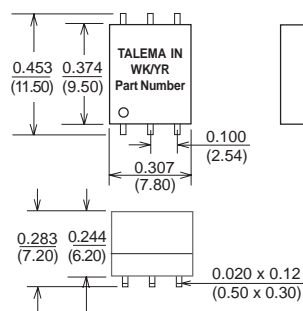
Test Frequency: Inductance measured @ 100kHz/20mVrms

Standard Packaging: Tape & Reel

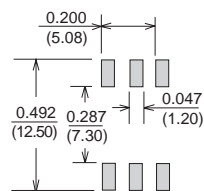
### TRJ Series • SMD RF Pulse Transformers

Part Number	OCL ( $\mu\text{H} \pm 30\%$ )	Turns Ratio $\pm 2\%$	$L_L$ Pri/Sec ( $\mu\text{H}$ Max)	$C_C$ Pri/Sec (pF Max)	Rise Time (nS Max)	Primary ET (V- $\mu\text{S}$ Min)	$R_{CuP}$ (mOhms)	$R_{CuS}$ (mOhms)	$R_{CuT}$ (mOhms)	Bandwidth for -3dB Loss		Schematic
										Freq. (MHz)		
										Low	High	
TRJ-20-6A	20	1:4	0.10	10	6.0	1.25	90	360	--	0.20	60	A
TRJ-20-6C	20	1:4ct	0.10	10	6.0	1.25	90	360	--	0.20	60	C
TRJ-40-6A	40	1:2	0.14	15	3.0	2.00	130	260	--	0.10	110	A
TRJ-40-6C	40	1:2ct	0.14	15	3.0	2.00	130	260	--	0.10	110	C
TRJ-40-6D	40	1:1:1	0.10	12	2.0	2.00	130	130	130	0.10	150	D
TRJ-80-6A	80	1:1	0.15	12	2.2	2.50	190	190	--	0.05	110	A
TRJ-80-6B	80	1ct:1ct	0.18	15	3.0	2.50	190	190	--	0.05	90	B
TRJ-80-6C	80	1:1ct	0.18	15	3.0	2.50	190	190	--	0.05	90	C
TRJ-80-6E	80	1:1.414	0.30	18	4.0	2.50	270	270	--	0.05	50	A
TRJ-80-6F	80	1:1.414ct	0.20	18	3.0	2.50	270	270	--	0.05	50	C

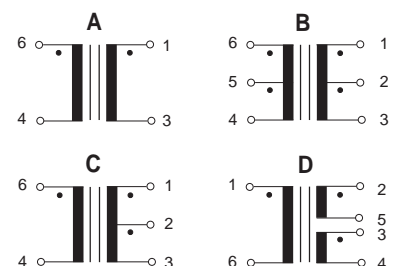
### TRJ



### Suggested Pad Layout



### Schematic



Surface coplanarity will be 0.004 (0.01) maximum

Dimensions: Inches (Millimeters)

Tolerance:  $\pm 0.010$  (0.25) unless specified otherwise