

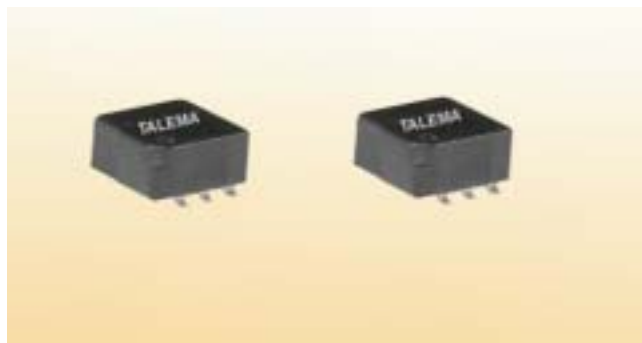


IC • T3 / DS3 / E3 / STS-1 Transformer Selection Guide

These miniature transformers are suitable for 75 ohm bandwidth applications requiring a very fast rise times

Talema manufactures a wide range of transmit and receive transformers for T3/DS3 applications using bit rates of 4.736 Mbps. These transformers can also be used with E3 interfaces at 34.368 Mbps and STS-1 applications at 51.84 Mbps. A listing of IC's with recommended Talema transformers is listed on the following cross reference chart.

Quality and consistency is guaranteed through 100% testing of the specified parameters for Primary Inductance, Leakage Inductance, Turns Ratio, DC resistance and Interwinding Capacitance. This ensures that the Return Loss and Pulse Waveshape requirements of CCITT G.703 and ATT T.A.34 can be met. Additionally all parts are 100% tested for 1500V minimum isolation.



Temperature Performance

Products are offered for both standard temperature (Commercial 0° to 70°C) and extended temperature (Industrial -40° to 85°C) applications. Required minimum inductance levels are maintained at the lower temperature limits.

IC - T3 / DS3 / E3 / STS-1 Interface Transformer Cross Reference Guide

IC Manufacturer	IC Part Number	Talema Transformer Part Number			
		Standard Temperature		Extended Temperature	
		Transmit	Receive	Transmit	Receive
Conexant (Rockwell)	CN8331, CN8332, CN8333	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
Infineon (Siemens)	PEB3452	--	--	DJE-40-6E	DJE-1+00-6A/6C
Lucent	T7296	DJE-40-6A	--	DJE-100-6C	--
Exar	XRT7295, XRT7295E	--	DJE-40-6A	--	DJE-100-6C
	XRT7296, XRT7298	DJE-40-6A	--	DJE-100-6C	--
	XRT73L00, XRT73L03, XRT73L04	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
	XRT7300, XRT7302	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
TDK	78P2241	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C
	78P2242, 78P2243, 78P2244	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C
	78P7200	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C
	78P7200L	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-40-6D
	78P2361, 78P2362	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C
Transwitch	MRT TXC-02050, E3	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C
	ART TXC-02020	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
	ARTE TXC-02021	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
	DART TXC-2030, DS3	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
	DART TXC-2030, E3	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C
	DS3LIM-SN TXC-20153G	DJE-40-6A	DJE-40-6A	DJE-100-6C	DJE-100-6C
	E3LIM TXC-20163	DJE-19-6B	DJE-40-6A	DJE-40-6D	DJE-100-6C



DJESeries • T3/DS3/E3/STS-1 Interface Transformers

These miniature transformers are suitable for 75 ohm bandwidth applications requiring a very fast rise times

Features

- low cost SMD for pick and place compatability while providing consistent and reliable coplanarity
- low leakage inductance
- excellent quality at extremely competitive price due to high volume production
- manufactured in ISO-9001 approved Talema facility

Electrical Specifications

Ratings @ 25°C ambient

Minimum isolation voltage: 1500 Vrms

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



Test Conditions

Inductance measured @ 1MHz, 10mV

Interwinding Capacitance and Leakage Inductance @ 100kHz, 10mV

Standard packaging: Tape & Reel

Electrical Specifications @ 25°C

DJE Series • SMD Wideband Interface Transformers

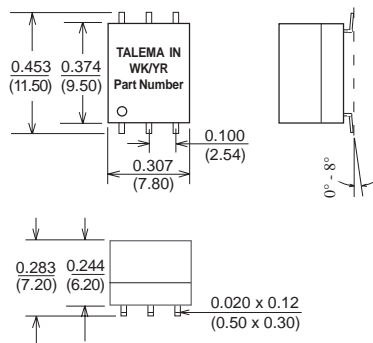
Operating Temperature Range 0°C to +70°C

Part Number	OCL Primary (µH Min)	OCL Primary @ -40°C (µH Min)	Turns Ratio Pri/Sec ±2%	L _L Pri/Sec (µH Max)	C _C Pri/Sec (pF Max)	Bandwidth 75 Ohms		Isolation Voltage (Vrms Min)	Primary Pins	Schematic
						Freq. (MHz)				
						Low	High			
DJE-19-6B	19	--	1:2CT	0.06	10	0.250	500	1500	1-3	B
DJE-40-6A	40	--	1:1	0.10	10	0.200	340	1500	1-3	A

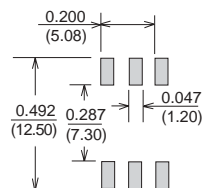
Extended operating temperature range -40° to +85°C

DJE-40-6B	40	19	1:2CT	0.11	12	.250	500	1500	1-3	B
DJE-40-6D	40	19	1:2CT	0.11	12	.250	500	1500	4-6	D
DJE-40-6E	40	19	1CT:1CT	0.10	10	.250	340	1500	1-3	E
DJE-100-6A	100	40	1:1	0.11	10	.200	340	1500	1-3	A
DJE-100-6C	100	40	1:1	0.11	10	.200	340	1500	4-6	C

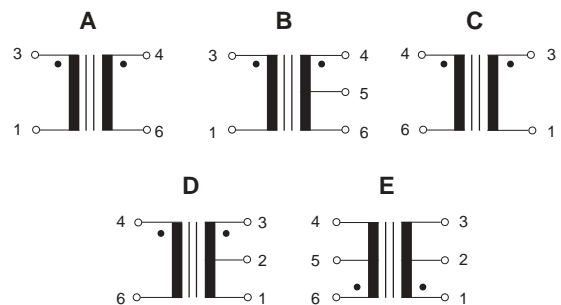
DJE-XXX-6X



Suggested Pad Layout



Schematic



Surface coplanarity will be 0.004 (0.01) maximum

Dimensions: Inches (Millimeters)

Tolerance: ±0.010 (0.25) unless specified otherwise