

# HALO **Duet™ SMD Dual Port Line Interface Modules**

ELECTRONICS, INC.

HALO Electronics is pleased to introduce the Duet™ and Duet+™ series of Dual Port Line Interface Modules for real estate sensitive T-1, E-1, PRI ISDN and CEPT applications. Designed to meet the requirements of G.703. UL60950 and EN60950 recognized. Isolation Modules are available for most Line Interface IC manufacturers' products. Non-standards are available.



Duet™ SMD Dual Port Line Interface Modules

### NZ Package



### Schematic



### Electrical Specifications @ 25°C

Isolation Voltage:	1,500Vrms
OCL:	1.5mH Typ.
PRI DCR:	0.8Ω Max.
LL:	0.5μH Max.
Cw/w:	35pF Max.
Crosstalk (0.1- 10 MHz):	-60dB Typ.
Operating Temp. Range:	-40 to +85°C

### Patented Construction

US Pat Nbrs:	5,656,985	6,297,721 B1
	6,297,720 B1	6,320,489 B1
	6,344,785 B1	6,662,431 B1

Part Number	Turns Ratio (±2%)		Primary Pins	
	TX	RX	TX	RX
TG08-1505NZRL	1CT:2CT	1CT:2CT	4-6 & 10-12	1-3 & 7-9
TG23-1505NZRL	1CT:2.42CT	1CT:2.42CT	4-6 & 10-12	1-3 & 7-9
TG24-1505NZRL	1CT:1.36CT	1CT:1.36CT	4-6 & 10-12	24-22 & 18-16
TG26-1505NZRL	1CT:2CT	1CT:2CT	1-3 & 10-12	21-19 & 18-16
TG27-S004NZRL	1CT:1.36CT	1CT:2CT	4-6 & 10-12	24-22 & 18-16
TG28-1505NZRL	1CT:1.36CT	1CT:1CT	4-6 & 10-12	24-22 & 18-16
TG37-S002NZRL	1CT:1.14CT	1CT:1.14CT	4-6 & 10-12	24-22 & 18-16
TG38-1505NZRL	1CT:1.15CT	1CT:1.15CT	4-6 & 10-12	1-3 & 7-9
TG42-1505NZRL	1CT:1.41CT	1CT:1.41CT	1-3 & 10-12	21-19 & 18-16
TG63-1505NZRL	1CT:1.15CT	1CT:2CT	4-6 & 10-12	24-22 & 18-16
TG63-S002NZRL	1CT:1.15CT	1CT:2CT	4-6 & 10-12	1-3 & 7-9
TG73-1505NZRL	1CT:2.3CT	1CT:1CT	4-6 & 10-12	24-22 & 18-16
TG74-1505NZRL	1CT:2CT	1CT:1CT	4-6 & 10-12	24-22 & 18-16
TG80-1505NZRL	1CT:2.45CT	1CT:2.45CT	4-6 & 10-12	24-22 & 18-16
TG91-1505NZRL	1CT:2.4CT	1CT:1CT	1-3 & 10-12	21-19 & 18-16

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### Duet+ Schematic A



### Duet+ Schematic B



### Electrical Specifications @ 25°C

Isolation Voltage: 1,500Vrms  
OCL: 1.5mH Typ.  
PRI DCR: 0.8Ω Max.  
LL: 0.5μH Max.  
Cw/w: 35pF Max.  
Crosstalk (0.1- 10 MHz): -60dB Typ.  
Operating Temp. Range: -40 to +85°C

Part Number	Turns Ratio (±2%)		Schematic	PRI Pins	
	TX	RX		TX	RX
TG36-1505NZRL	1CT:1.15CT	1CT:1.15CT	A	4-6 & 10-12	1-3 & 7-9
TG43-1505NZRL	1CT:1.41CT	1CT:1.41CT	B	1-3 & 10-12	21-19 & 18-16
TG48-1505NZRL	1CT:2CT	1CT:2CT	A	4-6 & 10-12	1-3 & 7-9
TG75-1505NZRL	1CT:2CT	1CT:1CT	A	4-6 & 10-12	24-22 & 18-16
TG85-1505NZRL	1CT:2CT	1CT:2CT	B	1-3 & 10-12	4-6 & 7-9
TG85-S002NZRL	1CT:2CT	1CT:2CT	B	1-3 & 10-12	21-19 & 18-16
TG93-1505NZRL	1CT:2.42CT	1CT:2.42CT	A	4-6 & 10-12	1-3 & 7-9
TG96-1505NZRL	1CT:2.3CT	1CT:1CT	A	4-6 & 10-12	24-22 & 18-16
TG97-1505NZRL	1CT:1.36CT	1CT:2CT	A	4-6 & 10-12	24-22 & 18-16
TG98-1505NZRL	1CT:1.36CT	1CT:1CT	A	4-6 & 10-12	24-22 & 18-16
TGSP-S225NZRL	1CT:2.4CT	1CT:1CT	B	1-3 & 10-12	21-19 & 18-16
TGSP-S281NZRL	1CT:1.15CT	1CT:2CT	A	4-6 & 10-12	1-3 & 7-9