

The OptoMOS™ line of Multifunction products combines optically isolated discrete component functions into a single package. These products mix and match solid state relays, optocouplers, bridge rectifiers, Darlington transistors, and zener diodes to create highly functional circuits in a single, small package. Multifunction devices allow designers to consolidate circuit functions into a single device, freeing up valuable board space

and reducing component count. Designed specifically for the telecommunications industry, the Integrated Telecom Circuit (ITC) series is well suited for voice telephony and modem applications, providing most of the major functions required when designing DAA (Data Access Arrangement) or voice (FXO) line interface circuits.

## Features

- 3750V<sub>rms</sub> input to output isolation
- Multiple functionality in single package
- Current limiting (part numbers with L suffix)
- Machine insertable, wave solderable
- TTL and CMOS compatible

## Applications

- Telecommunication/Datacommunication
- Instrumentation
- I/O subsystems
- Electronic switching
- Medical equipment (patient/equipment isolation)
- Security
- Aerospace
- Industrial controls



## Combination SSR & Optocoupler Products (IAX, IBx, TS, XS) - Operational temperature range of -40° to 85°C

Part Number	Relay Parameters				Optocoupler Parameters				Isolation Voltage V <sub>rms</sub>	Package Type ①	Features
	Load Voltage V <sub>P</sub>	Current Handling mA	On Resistance Ω	Input Control Current mA	Break-down Voltage V	Current Transfer Ratio %	Saturation Voltage V	Input Control Current mA			
IAA110P	350	100	35	5	20	33	0.5	6	3750	16-Pin SMT	
IAA170P	350	100	50	5	20	33	0.5	6	3750	16-Pin SMT	
IAB110P	350	100	35	5	20	33	0.5	6	3750	16-Pin SMT	
IAD110P	350	100	35	5	20	33	0.5	6	3750	16-Pin SMT	
IAD170P	350	100	50	5	20	33	0.5	6	3750	16-Pin SMT	
IBB110P	350	100	35	5	20	33	0.5	6	3750	16-Pin SMT	
TS112N	350	120	20	2	20	100	0.5	6	1500	8-Pin SMT	Narrow body
TS117	350	120	35	2	20	100	0.5	6	3750	8-Pin SMT, TH	
TS117L	350	120	35	2	20	100	0.5	6	3750	8-Pin SMT, TH	Current Limit
TS118	350	120	35	5	20	100	0.5	6	3750	8-Pin SMT, TH	Form B
TS120	350	120	35	5	20	1000	0.8	2	3750	8-Pin SMT, TH	
TS120L	350	120	35	5	20	1000	0.8	2	3750	8-Pin SMT	Current Limit
TS122	350	170	20	5	20	100	0.5	6	3750	8-Pin SMT, TH	
TS190	350	150	22	5	20	100	0.5	6	3750	8-Pin SMT, TH	
TS190L	350	150	25	5	20	100	0.5	6	3750	8-Pin SMT	Current Limit
XS170	350	120	50	2	20	100	0.5	6	3750	8-Pin SMT, TH	

① For Package Type, SMT indicates Surface Mount Technology while TH indicates Through-hole.

## Block Diagrams

