SEMICONDUCTOR NETWORKS

Ferranti semiconductor networks are arrays of interconnected or isolated semiconductor dice encapsulated in a single multilead package.

In addition to a useful range of standard arrays, Ferranti offer a **custom-build engineering service** to design network package layouts to meet customers' own specifications. Networks can be designed to replace directly discrete semiconductor assemblies.

STANDARD PRODUCTS — SILICON PLANAR DUAL TRANSISTORS

A range of dual transistors for differential amplifiers and other applications requiring matched transistors with a high degree of parameter uniformity, encapsulated in multilead TO–5.

- The 2N2060 is also available to British Standards specification BS9300C479

Ratings and Characteristics

at 25°C ambient temperature (each transistor)

Type	Maximum Ratings					h_{FE} at I_C = 10 mA V_{CE} = 6V*		f_T (Min.) MHz at I_C	
	V_{CBO} Volts	V_{CEO} Volts	V_{EBO} Volts	I_C mA	P_{tot} mA	Min.	Max.		mA
ZDT40	45	35	4	500	300	75	200	200	10
ZDT41	60	45	7	500	300	75	170	200	10
ZDT42	60	60	7	500	300	60	200	200	10
ZDT44	60	60	7	500	300	60	200	200	10
ZDT45	100	70	7	500	300	60	200	200	10
2N2060	100	60	7	500	500	50	150	60	50
2N2223	100	60	7	500	500	50	200	50	50
2N2223A	100	60	7	500	500	50	200	50	50

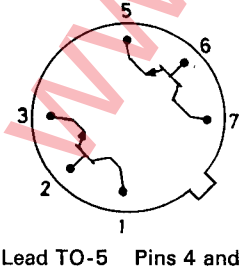
*Measured under pulsed conditions.

Transistor Matching Characteristics

Type	Max. Static Forward Current Transfer Tain Ratio h_{FE_1}/h_{FE_2}		Max. Base-Emitter Voltage Differential $\lvert V_{BE_1} - V_{BE_2} \rvert$ mV	Max. Voltage Differential Temperature Coefficient µV/°C
	Min.	Max.		
ZDT40	—		—	—
ZDT41	—		—	—
ZDT42	0·9	1·0	5	10
ZDT44	0·8	1·0	10	20
ZDT45	0·8	1·0	10	20
2N2060	0·9	1·0	5	10
2N2223	0·8	1·0	15	25
2N2223A	0·9	1·0	5	25

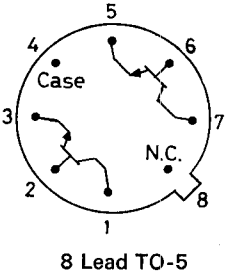
Pin Configuration

2N2060, 2N2223, 2N2223A

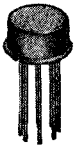


6 Lead TO-5 Pins 4 and 8 omitted
All leads electrically isolated from case.

ZDT40 through 45



8 Lead TO-5



8 Lead TO-5