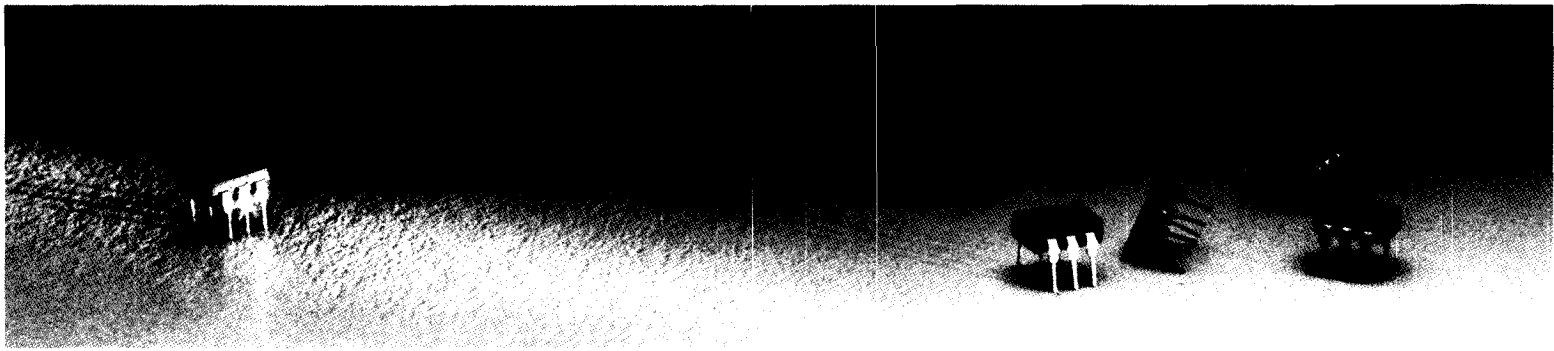




Couplers— Transistor Output (Cont'd)

Max Ratings @ T_A = 25°C

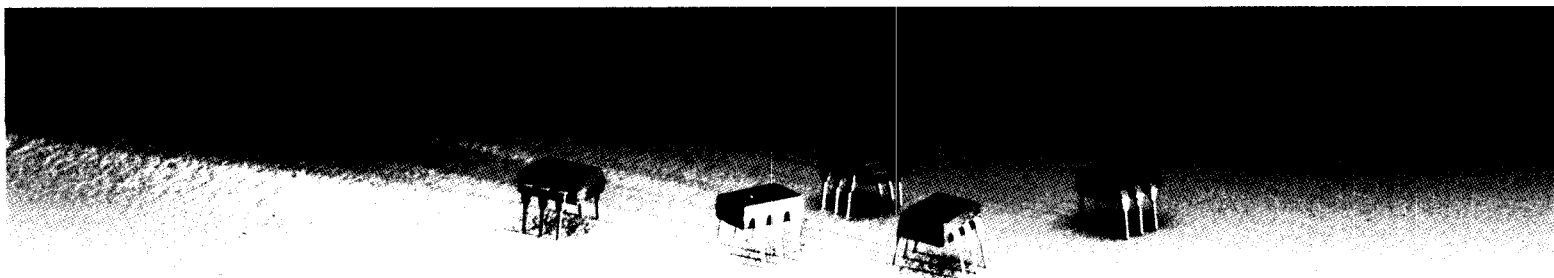
Device No.	P _D mW	Transistor		Diode		
		I _C mA	V _{CEO} V	V _R V	I _F mA	V _{ISO} kV
TIL111 ⁽³⁾	250	—	30	3.0	100	1.5
TIL112	250	—	20	3.0	100	1.5
TIL114 ⁽³⁾	250	—	30	3.0	100	2.5
TIL115	250	—	20	3.0	100	2.5
TIL116	250	—	30	3.0	100	2.5
TIL117	250	—	30	3.0	100	2.5
TIL118	250	—	20	3.0	100	1.5

Couplers— Darlington Output

Max Ratings @ T_A = 25°C

Device No.	P _D mW	Transistor		Diode		
		I _C mA	V _{CEO} V	V _R V	I _F mA	V _{ISO} kV
FCD850	250	125	30	3.0	80	1.5 ac
FCD850C	250	125	30	3.0	80	5.0
FCD855	250	125	55	3.0	80	1.5 ac
FCD855C	250	125	55	3.0	80	5.0
FDC860 ⁽³⁾	250	125	30	3.0	80	1.5 ac
FCD860C ⁽³⁾	250	125	30	3.0	80	5.0
FCD865 ⁽³⁾	250	125	30	3.0	80	1.5 ac
FCD865C ⁽³⁾	250	125	30	3.0	80	5.0
4N29 ⁽⁴⁾	250	125	30	3.0	80	2.5
4N30 ⁽⁴⁾	250	125	30	3.0	80	1.5
4N31 ⁽⁴⁾	250	125	30	3.0	80	1.5
4N32 ⁽⁴⁾	250	125	30	3.0	80	2.5
4N33 ⁽⁴⁾	250	125	30	3.0	80	1.5
H11B1	250	100	25	3.0	60	2.5
H11B2	250	100	25	3.0	60	1.5
TIL113 ⁽³⁾	250	—	30	3.0	100	1.5
TIL119	250	—	30	3.0	100	1.5
MCA230	250	—	30	3.0	60	1.5
MCA231 ⁽³⁾	250	50	30	3.0	60	1.5
MCA255	250	—	55	3.0	60	1.5

Notes:
 1. Standard transistor output
 2. High-speed transistor output guaranteed 2.0 μs max t_r and t_f with 100 Ω RL
 8.0 μs typ at 1K Ω RL
 3. CTR guaranteed with transistor in saturation
 4. JEDEC registered data and conditions
 5. CTR typ at 1.0 mA 40%



Coupled Characteristics				Input Diode Characteristics		Output Transistor Characteristics			Package No.
Min Current I_C/I_F %	Transfer Ratio $(\alpha) I_F$ mA	$(\alpha) V_{CE}$ V	t_r, t_f μs Typ	V_F V Max	$(\alpha) I_F$ mA	$V_{CE(sat)}$ V Max	$(\alpha) I_C$ mA	$(\alpha) I_F$ mA	
12	16	0.4	5.0	1.4	16	0.4	2.0	16	Opto-37
2.0	10	5.0	15	1.5	10	0.5	2.0	50	Opto-37
12	16	0.4	5.0	1.4	16	0.4	2.0	16	Opto-37
2.0	10	5.0	15	1.5	10	0.5	2.0	50	Opto-37
20	10	10	7.0	1.5	60	0.4	2.2	15	Opto-37
50	10	10	9.0	1.4	16	0.4	0.5	10	Opto-37
10	10	5.0	15	1.5	10	0.5	2.0	50	Opto-37

Coupled Characteristics					Input Diode Characteristics		Output Darlington Characteristics		
Min Current	Transfer Ratio		t _r	t _f	V _F		I _{CEO}		
I _C /I _F %	(α) I _F mA	(α) V _{CE} V	μs Typ	μs Typ	V Max	(α) I _F mA	μA Max	(α) V _{CE} V	Package No.
100	10	5.0	15	150	1.5	20	0.1	10	Opto-37
100	10	5.0	15	150	1.5	20	0.1	10	Opto-37
100	10	5.0	15	150	1.5	20	0.1	10	Opto-37
100	10	5.0	15	150	1.5	20	0.1	10	Opto-37
200	1.0	1.0	80	150	1.5	20	0.1	10	Opto-37
200	1.0	1.0	80	150	1.5	20	0.1	10	Opto-37
400	0.5	1.0	80	150	1.5	20	0.1	10	Opto-37
400	0.5	1.0	80	150	1.5	20	0.1	10	Opto-37
100	10	10	10	45	1.5	50	0.1	10	Opto-37
100	10	10	10	45	1.5	50	0.1	10	Opto-37
50	10	10	10	45	1.5	50	0.1	10	Opto-37
500	10	10	10	120	1.5	50	0.1	10	Opto-37
500	10	10	10	120	1.5	50	0.1	10	Opto-37
500	1.0	5.0	125	100	1.5	10	0.1	10	Opto-37
200	1.0	5.0	125	100	1.5	10	0.1	10	Opto-37
300	10	1.0	50	50	1.5	10	0.1	10	Opto-37
300	10	2.0	50	50	1.5	10	0.1	10	Opto-37
100	10	5.0	5.0	35	1.5	20	0.1	10	Opto-37
200	5.0	1.0	5.0	35	1.5	10	0.1	10	Opto-37
100	10	5.0	5.0	35	1.5	20	0.1	10	Opto-37