

2N 5368 through 2N 5375

COMPLEMENTARY SILICON GENERAL PURPOSE AMPLIFIERS AND SWITCHES

THE ABOVE TYPES ARE SILICON PLANAR EPITAXIAL TRANSISTORS FOR GENERAL PURPOSE AMPLIFIERS AND MEDIUM SPEED SWITCHING APPLICATIONS.

CASE TO-92F



ABSOLUTE MAXIMUM RATINGS

		2N5368(NPN)	2N5372(PNP)	2N5371(NPN)
		2N5369(NPN)	2N5373(PNP)	2N5375(PNP)
		2N5370(NPN)	2N5374(PNP)	
Collector-Base Voltage	V _{CB0}	60V	60V	40V
Collector-Emitter Voltage	V _{CEO}	30V	30V	30V
Emitter-Base Voltage	V _{EB0}	5V	5V	5V
Collector Current	I _C	500mA	500mA	500mA
Total Power Dissipation (T _A ≤ 25°C)	P _{tot}	500mW ** derate 4mW/°C above 25°C		

Operating Junction & Storage Temperature T_j, T_{stg}

-55 to 150°C

** 360mW in JEDEC registration.

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	BV _{CB0}	↑ Note 1 ↓			V	I _C =0.01mA I _E =0
Collector-Emitter Breakdown Voltage	LV _{CEO} *				V	I _C =10mA I _B =0
Emitter-Base Breakdown Voltage	BV _{EB0}				V	I _E =0.01mA I _C =0
Collector Cutoff Current	I _{CB0}			50	nA	V _{CB} =40V I _E =0
2N5368,69,70				50	nA	V _{CB} =40V I _E =0
2N5372,73,74				50	nA	V _{CB} =30V I _E =0
2N5371,75				50	nA	V _{EB} =3V I _C =0
Emitter Cutoff Current	I _{EB0}			50	nA	I _C =150mA I _B =15mA
Collector-Emitter Saturation Voltage	V _{CE(sat)} *		0.18	0.3	V	I _C =150mA I _B =15mA
Base-Emitter Saturation Voltage	V _{BE(sat)} *		0.84	1.3	V	I _C =150mA V _{CE} =10V
Base-Emitter Voltage	V _{BE} *		0.8	1.2	V	I _C =20mA V _{CE} =10V
Current Gain-Bandwidth Product	f _T				MHz	I _C =20mA V _{CE} =10V
2N5368 thru' 2N5371		250	370		MHz	I _C =20mA V _{CE} =10V
2N5372 thru' 2N5375		150	270			
Collector-Base Capacitance	C _{cb}			8	pF	V _{CB} =10V I _E =0
2N5368 thru' 2N5371				10	pF	f=1MHz
2N5372 thru' 2N5375						

Note 1 : Equal to the values of absolute maximum ratings.

* Pulse Test : Pulse Width=0.3ms, Duty Cycle=1%

For p-n-p devices, voltage and current values are negative.

MICRO ELECTRONICS LTD.

38 HUNG TO ROAD, KWUN TONG, HONG KONG. TELEX 43510
KWUN TONG P. O. BOX 69477 CABLE ADDRESS "MICROTRON"
TELEPHONE:- 3-430181-6 3-693363, 3-692423

FAX: 3-410321