

DIONICS INC.

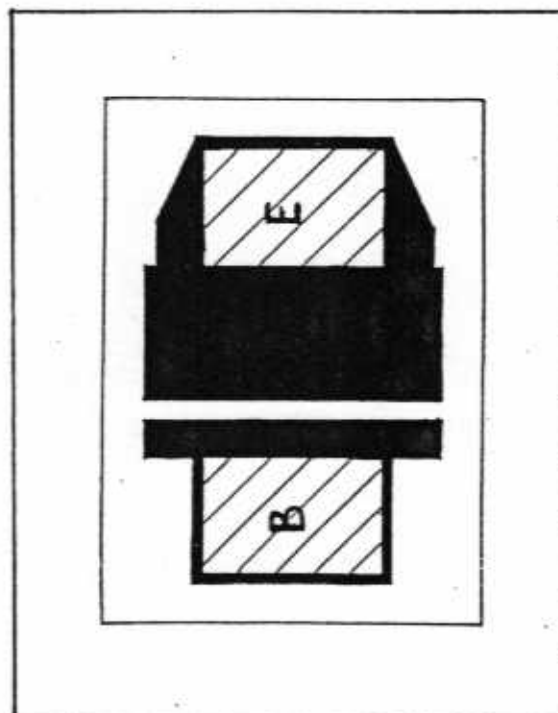
65 RUSHMORE ST., WESTBURY, N.Y. 11590 516-997-7474

SPECIFICATION SHEET

TYPE: 2N3904

CHIP APPEARANCE

CHIP SIZE: 12.0 x 16.0 mils



CHIP THICKNESS: 7.0 ± 1.0 mils

BONDING PAD DIMENSIONS in MILS

BASE: 3.0 x 4.5

EMITTER: 3.0 x 4.5

METALLIZATION:

TOP: ALUMINUM

BACKSIDE: GOLD / Si

WAFER DIAMETER: 3-INCH

NOTES:

ABSOLUTE MAXIMUM RATINGS:

ITEM	SYMBOL	RATINGS	UNIT
COLLECTOR-BASE VOLTAGE	V CBO	60	V
COLLECTOR-EMITTER VOLTAGE	V CEO	40	V
EMITTER-BASE VOLTAGE	V EBO	6	V
COLLECTOR CURRENT	I C	200	mA
COLLECTOR LOSS	P C	300	mW
JUNCTION TEMPERATURE	T J	150	deg-C
STORAGE TEMPERATURE	Tstg	-55/+150	deg-C

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ELECTRICAL CHARACTERISTICS

TYPE: 2N3904

ITEM	SYMBOL	COND.	MIN.	Typ.	MAX.	UNIT
COLLECTOR-EMITTER BREAKDOWN VOLTAGE	BV CEO	IC= 1mA	40	-	-	V
COLLECTOR-BASE BREAKDOWN VOLTAGE	BV CBO	IC=10uA	60	-	-	V
EMITTER-BASE BREAKDOWN VOLTAGE	BV EBO	IE=10uA	6	-	-	V
COLLECTOR SATURATION	VCE (SAT)	IC= 50mA IB= 5mA	-	-	0.3	V
DC CURRENT GAIN	H FE	VCE= 1V IC= 10mA	100	-	300	
TRANSITION FREQUENCY	fT	VCE= 20V IC= 10mA	300	-	-	MHz
OUTPUT CAPACITANCE	COB	VCB= 5V f= 1MHz	-	-	4.0	pF

PROBING SPEC:

NO.	MODE	LIMIT		CONDITION
		MIN.	MAX.	
1	V BE	-	0.9V	IB= 10mA
2	BV CEO	45V	-	IC= 0.1mA
3	I CBO	-	1uA	VCB= 60V
4	I EBO	-	1uA	VEB= 6V
5	I CEO	-	1uA	VCE= 42V
6	H FE	100	300	VCE= 1V IC= 10mA
7	VCE (SAT)	-	0.3V	IC= 50mA IB= 5mA

