FAIRCHILD EPOXY TRANSISTORS

THE FAIRCHILD EPOXY TRANSISTOR

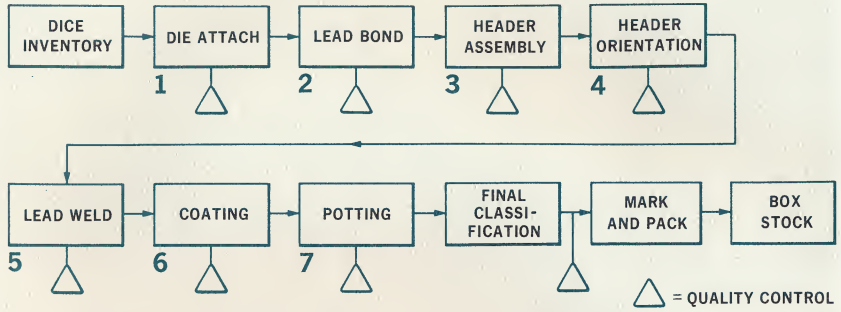
The transistor assembly technology described on the following pages was developed for the Electronics Industry to provide a low-cost, high-performance, reliable Silicon Planar Transistor — lower in cost than Germanium.

These devices have found wide-spread usage in product areas such as: T.V. sets, Radios, Test and Measuring Equipment, Communications and Computing Equipment.

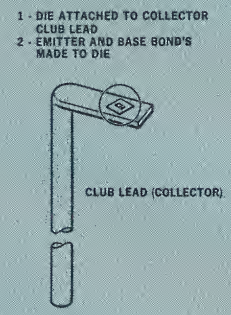
Additional advantages obtained using this assembly technology are lead arrangements compatible with Standard TO-18s and TO-5s and excellent thermal ratings.

Since the assembly operation is similar to that of conventional metal-can transistors, special assemblies (multiple dice in one package) and optional package outlines can easily be accomplished. Also, improvements in technology can be implemented without the costly and time-consuming delays normally associated with a totally-automated production line.

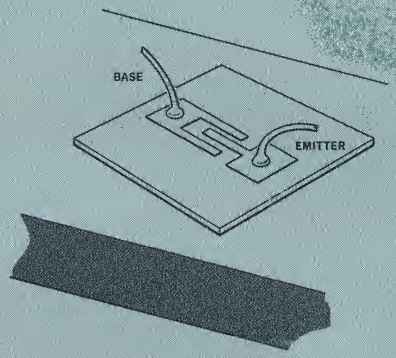
PROCESS FLOW DIAGRAM



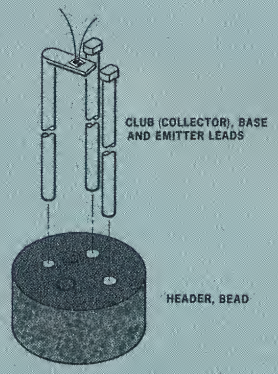
STEP 1 DIE ATTACH



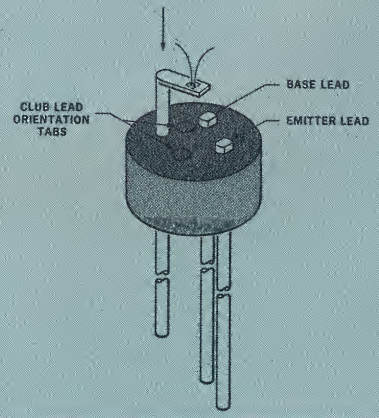
STEP 2 LEAD BOND



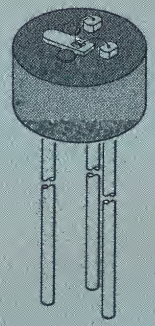
STEP 3 HEADER ASSEMBLY



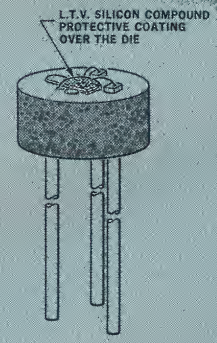
STEP 4 HEADER ORIENTATION



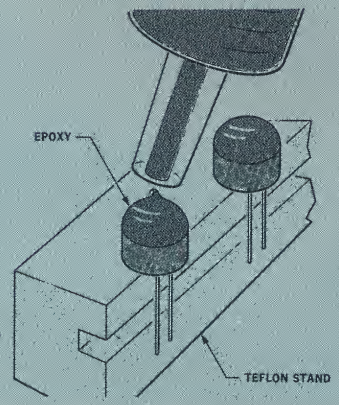
STEP 5 LEAD WELD



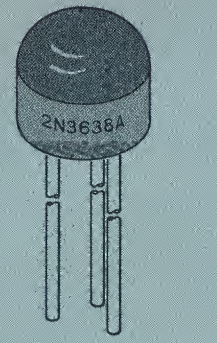
STEP 6 COATING



STEP 7 POTTING



FINAL PRODUCT



PRICE LIST
(1 THROUGH 4999)

	PACKAGE	1-99	100-999	1000-4999
2N3563	TO-18	$1.20	$ .80	$ .72
2N3564	TO-18	.90	.60	.54
2N3565	TO-18	.90	.60	.54
2N3566	TO-5	1.50	1.00	.90
2N3567	TO-5	.90	.60	.54
2N3568	TO-5	1.30	.85	.78
2N3569	TO-5	1.35	.90	.81
†2N3638	TO-5	.46	.31	.28
†2N3638A	TO-5	1.00	.67	.60
†2N3639	TO-18	.65	.43	.39
†2N3640	TO-18	.70	.46	.42
2N3641	TO-5	.90	.60	.54
2N3642	TO-5	.95	.63	.57
2N3643	TO-5	.95	.63	.57
2N3646	TO-18	.70	.46	.42

Effective January 15, 1965

SHORT FORM CHARACTERIZATION

	h_{FE} min	h_{FE} max	@ I_C ma	LV_{CEO} volts	*Cob pf	*F^T Mc
2N3563	20	200	8	12	1.4	900
2N3564	20	120	15	15	2.5	750
2N3565	150	600	1	25	3	100
2N3566	150	600	10	30	13	40
2N3567	40	120	150	40	13	60
2N3568	40	120	150	60	13	60
2N3569	100	300	150	40	18	60
†2N3638	30		50	25	12	150
†2N3638A	30	180	50	45	10	150
†2N3639	30	120	10	6	1.85	750
†2N3640	30	120	10	12	1.85	750
2N3641	40	120	150	30	6	400
2N3642	40	120	150	45	6	400
2N3643	100	300	150	30	6	400
2N3646	30	120	30	15	3.3	550

†PNP Transistors *Typical values