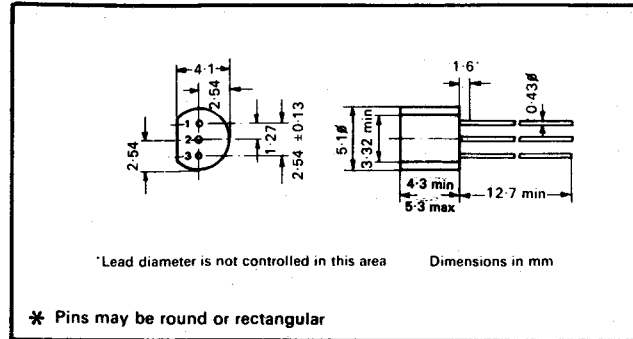
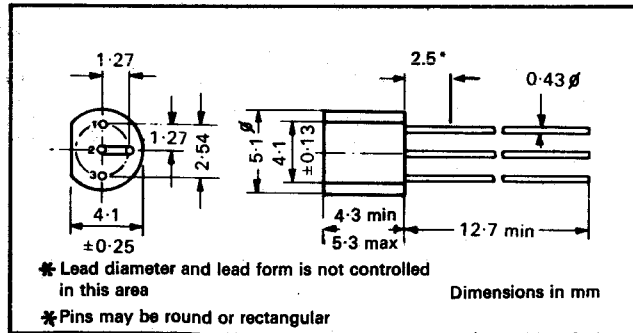


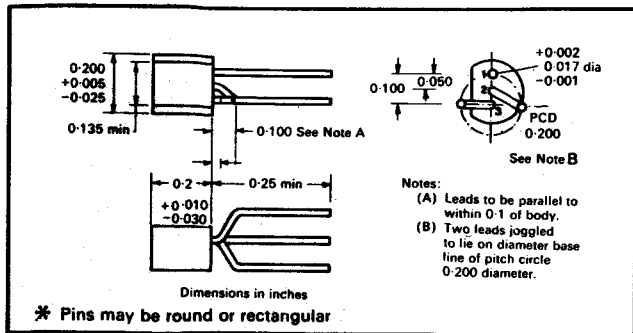
Case Outlines



TO-92 Outlines 1, 5, 6, 10 & 11



TO-92 Outlines 2, 7 & 12 to TO-18 pin circle



TO-92 Outline 3 Preformed to TO-5

General Purpose Transistors — Ic up to 800 mA

Device Type (case outline in brackets)	Polarity	Maximum ratings				PTOT		hFE			VCE(sat)			min. ft MHz	Alternative case outlines
		BV CBO V	BV CEO V	Cont IC A	pk IC A	Free Air @ 25°C mW	Case @ 25 C W	min.	IC mA	VCE min.	max.	IC mA	IB mA		
		2N3702 (1)	PNP	40	25	0.5	0.8	360*	0.6	60	50	5	0.25		
2N3703 (1)	PNP	50	30	0.5	0.8	360*	0.6	30	50	5	0.25	50	5	100	
2N3704 (1)	NPN	50	30	0.5	0.8	360*	0.6	100	50	2	0.6	100	5	100	
2N3705 (1)	NPN	50	30	0.5	0.8	360*	0.6	50	50	2	0.8	100	5	100	
2N3706 (1)	NPN	40	20	0.5	0.8	360*	0.6	30	50	2	1.0	100	5	100	
TIS90 (1)	NPN	40	40	0.4	0.8	625	1.6	100	50	2	0.25	50	5	100	} Also available as matched pairs as TIS90M-TIS91M
TIS91 (1)	PNP	40	40	0.4	0.8	625	1.6	100	50	2	0.25	50	5	100	

* Jecdec registered dissipation. TI guarantees 625 mW on these types.

General Purpose Ic up to 2A Super Silect

Device Type (case outline in brackets)	Polarity	Maximum ratings				PTOT Free Air @ 25°C mW	hFE				VCE(sat)			min. ft MHz	Notes
		BV CBO V	BV CEO V	Cont IC A	pk IC A		min.	IC mA	min.	IC mA	max. V	IC mA	IB mA		
		BFR50 (1)	NPN	80	35		1.0	2.0	800	30	150	15	1000		
BFR51 (1)	NPN	60	30	1.0	2.0	800	40	150	15	1000	1.6	1000	100	50	
BFR52 (1)	NPN	40	20	1.0	2.0	800	60	150	15	1000	1.6	1000	100	50	
BFT82 (1)	NPN	90	75	1.0	2.0	800	40	100	10	1000	1.75	1000	100	100	
BFT83 (1)	NPN	70	60	1.0	2.0	800	75	100	10	1000	1.5	1000	100	100	
BFT84 (1)	NPN	60	50	1.0	2.0	800	100	100	10	1000	1.5	1000	100	100	
BFR39 (1)	NPN	90	80	1.0	2.0	800	50	100	20	1000	1.0	1000	100	100	
BFR40 (1)	NPN	70	60	1.0	2.0	800	75	100	25	1000	0.5	1000	100	100	
BFR41 (1)	NPN	60	50	1.0	2.0	800	100	100	25	1000	0.5	1000	100	100	
BFR60 (1)	PNP	80	35	1.0	2.0	800	30	150	15	1000	1.0	1000	100	60	} Complementary to BFR50, BFR51, BFR52
BFR61 (1)	PNP	60	30	1.0	2.0	800	40	150	15	1000	1.6	1000	100	50	
BFR62 (1)	PNP	40	20	1.0	2.0	800	60	150	15	1000	1.6	1000	100	50	
BFT85 (1)	PNP	90	75	1.0	2.0	800	40	100	10	1000	1.75	1000	100	100	
BFT86 (1)	PNP	70	60	1.0	2.0	800	75	100	10	1000	1.5	1000	100	100	
BFT87 (1)	PNP	60	50	1.0	2.0	800	100	100	10	1000	1.5	1000	100	100	
BFR79 (1)	PNP	90	80	1.0	2.0	800	50	100	20	1000	1.0	1000	100	100	
BFR80 (1)	PNP	70	60	1.0	2.0	800	75	100	25	1000	0.5	1000	100	100	
BFR81 (1)	PNP	60	50	1.0	2.0	800	100	100	25	1000	0.5	1000	100	100	

All types are also available with TO-5 preformed leads as outline 3—order as e.g. BFR50 TO-5.