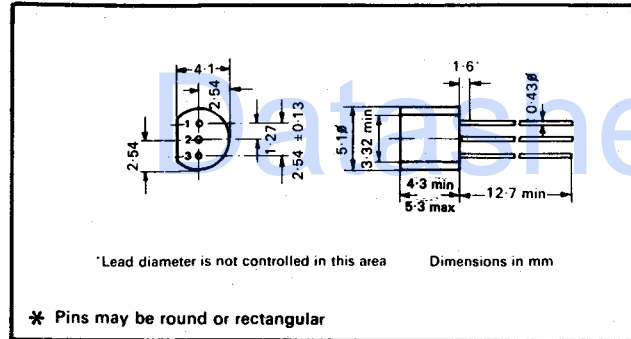
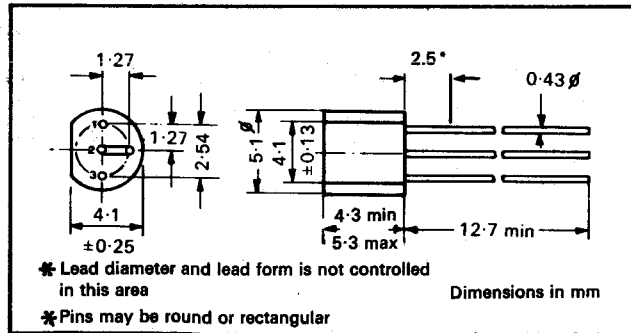


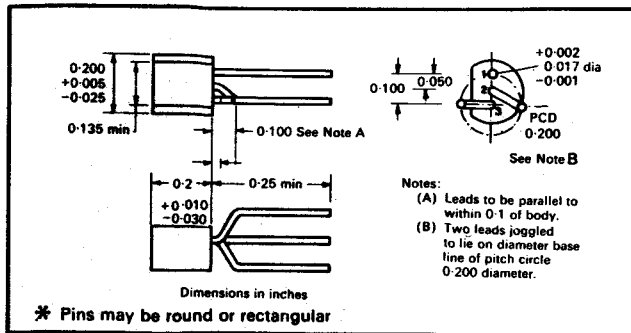
## Case Outlines



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	

\* Jedec 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.

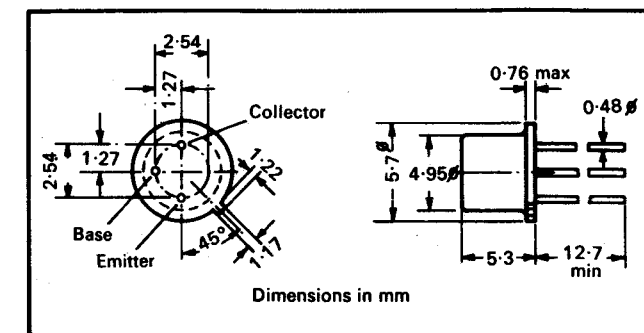
## High Current NPN Amplifiers

Device Type	Polarity	Case	Maximum ratings				hFE1			hFE2			f <sub>t</sub> MHz	VCE(sat)		Available in TO18	Notes
			BV CBO	BV CEO	BV EBO	ICM	IC	min.	max.	IC	min.	max.		IC	V		
			V	V	V	mA	mA	mA	mA	mA	mA	A		V			
BFT39	NPN	TO39	90	80	5	1000	100	50	250	1000	20	—	100	1.0	1.6	BFT29	hFE 25 min at 1mA
BFT40	NPN	TO39	70	60	5	1000	100	75	250	1000	25	—	100	1.0	1.0	BFT30	hFE 45 min at 1mA
BFT41	NPN	TO39	60	50	5	1000	100	100	300	1000	25	—	100	1.0	1.0	BFT31	hFE 45 min at 1mA
BFY50	NPN	TO39	80	35	6	1000	150	30	—	1000	15	—	60	1.0	1.0	BFT53	hFE 20 min at 10mA
BFY51	NPN	TO39	60	30	6	1000	150	40	—	1000	15	—	50	1.0	1.6	BFT54	hFE 30 min at 10mA
BFY52	NPN	TO39	40	20	6	1000	150	60	—	1000	15	—	50	1.0	1.6	BFT55	hFE 30 min at 10mA
BC142	NPN	TO39	80	60	5	800	200	20	—	—	—	—	40	0.2	0.4		
BC300	NPN	TO39	120	80	7	1000	150	40	240	500	20	—	120	0.15	0.5		hFE 20 min at 100μA Available in 3 hFE Bands at I <sub>c</sub> =150 mA
BC301	NPN	TO39	90	60	7	1000	150	40	240	500	20	—	120	0.15	0.5		
BC302	NPN	TO39	60	45	7	1000	150	40	240	500	20	—	120	0.15	0.5		
2N697	NPN	TO39	60	40	5	1000	150	40	120	—	—	—	50	0.15	1.5		hFE 20 min at 100μA hFE 35 min at 100μA
2N1613	NPN	TO39	75	50	7	1000	150	40	120	500	20	—	60	0.15	1.5		
2N1711	NPN	TO39	75	50	7	1000	150	100	300	500	40	—	70	0.15	1.5		
2N1890	NPN	TO39	100	60	7	—	150	100	300	—	—	—	60	0.15	5.0		hFE 20 min at 100μA
2N1893	NPN	TO39	120	80	7	500	150	40	120	10	35	—	50	0.15	5.0		
2N2243A	NPN	TO39	120	80	7	1000	150	40	120	10	30	—	50	0.15	0.25		

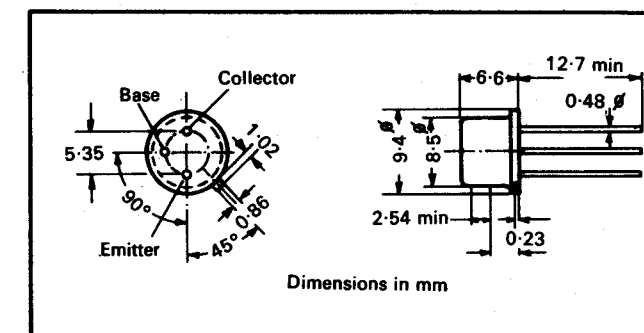
## PNP Amplifiers and Fast Switches

Device Type	Polarity	Case	Maximum ratings				hFE1			hFE2			f <sub>t</sub> min. MHz	VCE(sat)		Max. ton ns	Max. ts ns	Max. toff ns	Notes
			BV CBO	BV CEO	BV EBO	ICM	IC	min.	max.	IC	min.	max.		IC	V				
			V	V	V	mA	mA	mA	mA	mA	mA	mA		mA	V				
2N2411	PNP	TO18	25	20	5	300	10	20	60	50	10	—	140	10	0.20	25	90	100	hFE 10 min at 50μA
2N2412	PNP	TO18	25	20	5	300	10	40	120	50	20	—	140	10	0.20	25	90	100	hFE 20 min at 50μA
2N2894	PNP	TO18	12	12	4	200	10	30	—	30	40	150	400	10	0.15	60	—	90	hFE 25 min at 100mA
2N3012	PNP	TO18	12	12	4	200	10	25	—	30	30	120	400	10	0.15	60	—	75	hFE 30 min at 100mA
2N3576	PNP	TO18	20	15	5	200	10	40	120	100	10	—	400	10	0.15	30	30	50	VCE(sat) 0.5V max at 100mA
2N3829	PNP	TO52	35	20	20	500	10	25	—	30	30	120	350	10	0.18	25	50	65	hFE 25 min at 100mA
2N4260	PNP	TO72	15	15	45	30	10	30	150	30	20	—	1800	10	0.35	1.2	—	1.2	

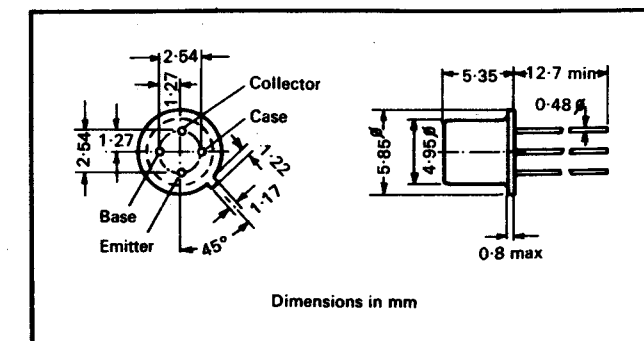
## Case Outlines



TO-18



TO-39



TO-72

## Core Drivers

Device Type	Polarity	Case	Maximum ratings				hFE1			hFE2			ft min. MHz	VCE(sat)		Max. ton ns	Max. ts ns	Max. toff ns	Notes
			BV CBO	BV CEO	BV EBO	ICM	IC mA	min.	max.	IC mA	min.	max.		IC mA	V				
			V	V	V	mA													
2N3724A	NPN	TO39	50	30	6	1200	100	60	150	1500	25	—	300	100	0.20	35	50	60	} Guaranteed switching time at 1 amp
2N3725A	NPN	TO39	80	50	6	1200	100	60	150	1500	20	—	300	100	0.26	35	50	60	
2N3244	PNP	TO39	40	40	5	1000	500	50	150	750	25	—	175	150	0.3	—	140	—	

## Very High Voltage Amplifiers

Device Type	Polarity	Case	Maximum ratings				hFE1			hFE2			ft typ MHz	VCE(sat)		Notes
			BV CBO	BV CEO	BV EBO	ICM	IC mA	min.	max.	IC mA	min.	max.		IC mA	V	
			V	V	V	mA										
BF257	NPN	TO5	160	160	5	200	30	25	—				110	30	1.0	} Designed as high voltage video amplifiers
BF258	NPN	TO5	250	250	5	200	30	25	—			110	30	1.0		
BF259	NPN	TO5	300	300	5	200	30	25	—			110	30	1.0		
BF336	NPN	TO5	185	180	5	100	30	20	—			80	30		} Intended for Video Applications	
BF337	NPN	TO5	250	200	5	100	30	20	—			80				
BF338	NPN	TO5	300	225	5	100	30	20	—			80				
BF177	NPN	TO5	115	80	5	100	15	20	—	20	20	—	120			
BF178	NPN	TO5	160	115	5	100	20	20	—	30	20	—	120			
BF179	NPN	TO5	250	115	5	100	20	20	—	—	—	—	120			
BFT57	NPN	TO18	160	160	5	200	30	25	—	—	—	—	110	30		1.0
BFT58	NPN	TO18	250	250	5	200	30	25	—	—	—	—	110	30		1.0
BFT59	NPN	TO18	300	300	5	200	30	25	—	—	—	—	110	30		1.0
BC312	NPN	TO5	100	100	5	150	1	40	—	30	50	200	100	50		2.0
BD150A	NPN	TO5	300	220	6	500	40	20	—	80	20	—	80	1.0	} Designed as High Current Line Drivers	
BD150B	NPN	TO5	250	150	6	500	40	20	—	80	20	—	80	1.0		
BD150C	NPN	TO5	200	150	6	500	40	20	—	80	20	—	80	1.0		
2N3440	NPN	TO5	300	250	7	1000	20	40	160	—	—	—	15*	50	0.5	} For High Current Applications
2N3439	NPN	TO5	450	350	7	1000	20	40	160	—	—	—	15*	50	0.5	
BFQ35	PNP	TO5	160	160	5	200	10	50	400	50	10	—	80	20	0.5	} BF257/8/9 Complementary Types
BFQ36	PNP	TO5	250	250	5	200	10	40	350	50	10	—	80	20	0.5	
BFQ37	PNP	TO5	300	300	5	200	10	30	300	50	10	—	80	20	0.5	

## Complementary Pairs

### Medium Current Amplifiers & Switches

NPN TO5	PNP
2N2218	2N2904
2N2218A	2N2904A
2N2219	2N2905
2N2219A	2N2905A

### Low level G.P. Amplifiers

NPN TO18	PNP
BC107	BC177
BC108	BC178
BC109	BC179

### High Current Amplifiers

NPN TO5	PNP
BFT39	BFT79
BFT40	BFT80
BFT41	BFT81
BFY50	BFT60
BFY51	BFT61
BFY52	BFT62

NPN TO18	PNP
2N2221	2N2906
2N2221A	2N2906A
2N2222	2N2907
2N2222A	2N2907A

NPN TO18	PNP
BC325	2N2483
BC326	2N2484
BCW34	BCW35

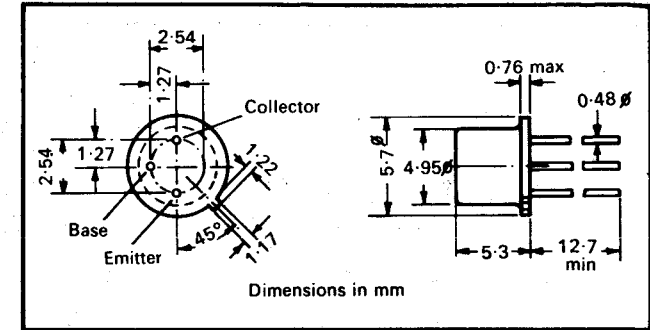
NPN TO5	PNP
BC142	BC143
BC301	BC303
BC302	BC304
BFT32	BFT35
BFT33	BFT36
BFT34	BFT37

## Small Signal Transistors

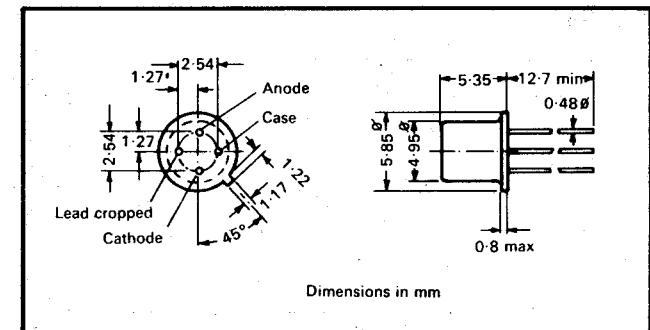
BS Type Number	Commercial Equivalent	Case Outline	Polarity	Absolute Maximum Rating			hFE at Collector Current			Min. ft MHz	Comments	
				V <sub>CB</sub> V	V <sub>CE</sub> V	V <sub>EB</sub> V	hFE min.	hFE max.	I <sub>C</sub> mA			
BS9300 C328	2S104	TO18	NPN	60	45	6	80	200	5	80	ton 140 ns toff 500 ns ton 140 ns toff 500 ns High Voltage hFE 35-100 in IC-1mA	
BS9300 C371	2N2221A*	TO18	NPN	60	45	6	35	85	10	150		
BS9300 C372	2N2222A*	TO18	NPN	60	45	6	75	170	10	150		
BS9300 C404	2N1893	TO5	NPN	120	80	7	40	120	150	60		
BS9300 C460	2N1613	TO5	NPN	75	50	7	40	120	150	60	High Gain General Purpose Amplifier SRDE. Low Level Amplifier High Frequency Amplifier and Fast Switch Low Level Low Noise High Gain Amplifiers Medium Power High Gain General Purpose Amplifier Complementary to CV7580 & CV7581 Complementary to CV7495 & CV7496	
BS9300 C461	2S103	TO18	NPN	60	45	6	40	100	5	60		
BS9300 C462	2N2411	TO18	PNP	25	20	5	20	60	10	150		
BS9300 C463	2N2412	TO18	PNP	25	20	5	40	120	10	150		
BS9300 C478	2N918	TO12	NPN	30	15	3	30	—	3	100		
BS9300 C492	2N929	TO18	NPN	45	45	5	40	120	0.01	30		
BS9300 C493	2N930	TO18	NPN	45	45	5	100	300	0.01	30		
BS9300 C495	2N696	TO5	NPN	60	40	5	20	60	150	50		
BS9300 C496	2N697	TO5	NPN	60	40	5	40	120	150	50		
BS9300 C580	2N1131	TO5	PNP	50	35	5	20	45	150	50		
BS9300 C581	2N1132	TO5	PNP	50	35	5	30	90	150	60		
BS9300 C588	2S104	TO18	NPN	60	45	6	80	200	5	100		NPN General Purpose Amplifiers PNP High Frequency Amplifiers and Saturated Switches High Voltage General Purpose Amplifier
BS9300 C596	2S103	TO18	NPN	60	45	6	40	100	5	80		
BS9300 C630	2N2696	TO18	PNP	25	25	4	30	130	50	100		
BS9300 C631	2N2927	TO5	PNP	25	25	4	30	130	50	100		
BS9300 C633	2N1937	TO5	PNP	120	100	6	65	200	200	60		
BS9300 C637	2N2905*	TO5	PNP	32	32	5	80	160	1.0	40	General Purpose PNP Amplifiers High Speed Medium Power Switching and General Purpose Amplifiers High Speed Switching and General Purpose Medium Power Amplifiers	
BS9300 C638	2N2905A*	TO5	PNP	60	60	5	60	120	1.0	40		
BS9300 C644	BC107A*	TO18	NPN	65	65	5	50	200	10	50		
BS9300 C669	2N2904	TO5	PNP	60	40	5	40	120	150	200		
BS9300 C670	2N2905	TO5	PNP	60	40	5	100	300	150	200		
BS9300 C671	2N2904A	TO5	PNP	60	60	5	40	120	150	200		
BS9300 C672	2N2905A	TO5	PNP	60	60	5	100	300	150	200		
BS9300 C673	2N2906	TO18	PNP	60	40	5	40	120	150	200		
BS9300 C674	2N2907	TO18	PNP	60	40	5	100	300	150	200		
BS9300 C675	2N2906A	TO18	PNP	60	60	5	40	120	150	200		
BS9300 C676	2N2907A	TO18	PNP	60	60	5	100	300	150	200		
BS9300 C722	BFY50	TO5	NPN	80	35	6	30	100	150	50		General purpose Amplifier
BS9300 C723	BFY51	TO5	NPN	60	30	6	40	120	150	50		
BS9300 C724	BFY52	TO5	NPN	40	20	6	60	200	150	50		
BS9300 C725	BFY50	TO5	NPN	80	35	6	30	—	150	50		General Purpose Amplifier and Saturated Switches 1 Amp hFE Minimum 10 High Gain Medium Power Amplifier Very High Gain Low Noise Low Level Amplifier
BS9300 C726	BFY51	TO5	NPN	60	30	6	35	—	150	50		
BS9300 C727	BFY52	TO5	PNP	40	20	6	50	—	150	50		
BS9300 C735	2N1711	TO5	PNP	75	50	7	100	300	150	70		
BS9300 C736	2N2484	TO18	NPN	60	60	6	100	500	0.01	60		
BS9300 C748	2N2221*	TO18	NPN	25	25	4	38	162	10	120	High Frequency, Low Power Switching and Amplifier Applications. Fully Complementary High Frequency, Medium Power NPN Amplifier High Current Switches	
BS9300 C749	2N2906*	TO18	PNP	25	25	4	38	162	10	120		
BS9300 C750	2N2221A*	TO18	NPN	45	35	4	38	162	10	120		
BS9300 C751	2N2906A*	TO18	PNP	45	35	4	38	162	10	120		
BS9300 C752	2N2222A*	TO18	NPN	45	35	4	75	250	10	120		
BS9300 C753	2N2907A*	TO18	PNP	45	35	4	75	250	10	120		
BS9300 C754	2N2222*	TO18	NPN	25	25	4	75	250	10	120		
BS9300 C755	2N2907*	TO18	PNP	25	25	4	75	250	10	120		
BS9300 C756	2N2218	TO5	NPN	60	30	5	40	120	150	250		
BS9300 C764	2N2219	TO5	NPN	60	30	5	100	300	150	250		
BS9300 C765	2N2218A	TO5	NPN	75	40	6	40	120	150	250		
BS9300 C766	2N2219A	TO5	NPN	75	40	6	100	300	150	250		
BS9300 C767	2N2221	TO18	NPN	60	30	5	40	120	150	250		TO18 Version of CV7763-66 General Purpose Amplifier High Voltage Amplifier
BS9300 C768	2N2222	TO18	NPN	60	30	5	100	300	150	250		
BS9300 C769	2N2221A	TO18	NPN	75	40	6	40	120	150	250		
BS9300 C770	2N2222A	TO18	NPN	75	40	6	100	300	150	250		
BS9300 C774	2N2194	TO5	NPN	60	40	5	20	60	150	50		
BS9300 C775	2N2243A	TO5	NPN	120	80	7	40	120	150	50		

\*Near Equivalent

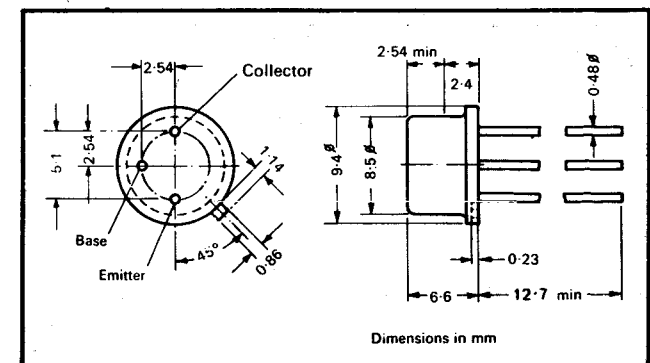
## Case Outlines



TO-18



TO-72



TO-5

## Small Signal Transistors

BS Type Number	Commercial Equivalent	Case Outline	Polarity	Absolute Maximum Rating			hFE at Collector Current			Min. ft MHz	Comments
				V <sub>CB</sub> V	V <sub>CE</sub> V	V <sub>EB</sub> V	hFE min.	hFE max.	I <sub>C</sub> mA		
BS9360 F001	BFT32	TO5	NPN	80	60	5	50	300	150	50	} 3 Amp Capability Amplifier/Switch
BS9360 F001	BFT33	TO5	NPN	100	80	5	50	250	150	50	
BS9360 F001	BFT34	TO5	NPN	120	100	5	50	200	150	50	
BS9360 F002	BFT35	TO5	PNP	80	60	5	50	300	150	50	} 3 Amp Capability Amplifier/Switch
BS9360 F002	BFT36	TO5	PNP	100	80	5	50	250	150	50	
BS9360 F002	BFT37	TO5	PNP	120	100	5	50	200	150	50	
BS9360 F003	BFT29	TO18	NPN	90	80	5	50	250	100	100	} High Current Amplifier/Switch
BS9360 F003	BFT30	TO18	NPN	70	60	5	75	250	100	100	
BS9360 F003	BFT31	TO18	NPN	60	50	5	100	300	100	100	
BS9360 F004	BFT57	TO18	NPN	160	160	5	25	—	30	40	} Very High Voltage Amplifiers
BS9360 F004	BFT58	TO18	NPN	250	250	5	25	—	30	40	
BS9360 F004	BFT59	TO18	NPN	300	300	5	25	—	30	40	
BS9360 F005	BFT20	TO18	PNP	80	35	5	30	—	150	60	} General Purpose Amplifier
BS9360 F005	BFT21	TO18	PNP	60	30	5	40	—	150	60	
BS9360 F005	BFT22	TO18	PNP	40	20	5	60	—	150	60	
BS9360 F005	BFT69	TO18	PNP	90	80	5	50	250	100	100	} High Current Amplifier/Switch
BS9360 F005	BFT70	TO18	PNP	70	60	5	75	250	100	100	
BS9360 F005	BFT71	TO18	PNP	60	50	5	100	300	100	100	
BS9360 F014	2N3440	TO5	NPN	300	250	7	40	160	20	15	} Very High Voltage Amplifier/Switch
BS9361 F006	2N3053	TO5	NPN	60	40	5	50	250	150	100	
BS9365 F009	BCY70	TO18	PNP	50	40	5	50	—	10	250	} Low Level General Purpose Amplifiers and Switches
BS9365 F009	BCY71	TO18	PNP	45	45	5	100	—	10	200	
BS9365 F009	BCY72	TO18	PNP	25	25	5	50	—	10	200	
BS9365 F010	BFX29	TO5	PNP	60	60	5	50	—	10	100	} Medium Current Switches
BS9365 F011	BFX30	TO5	PNP	65	65	5	50	290	10	100	
BS9365 F012	BFY50	TO5	NPN	80	35	6	30	—	150	60	} High Current Amplifiers
BS9365 F012	BFY51	TO5	NPN	60	30	6	40	—	150	50	
BS9365 F012	RFY52	TO5	NPN	40	20	6	60	—	150	50	
BS9365 F112	BC107	TO18	NPN	50	45	6	110	450	2	150	} Low Level General Purpose Amplifiers
BS9365 F112	BC108	TO18	NPN	30	20	5	110	800	2	150	
BS9365 F112	BC109	TO18	NPN	30	20	5	200	800	2	150	
BS9365 F121	BFT39	TO5	NPN	90	80	5	50	250	100	100	} High Current Amplifiers
BS9365 F122	BFT40	TO5	NPN	70	60	5	75	250	100	100	
BS9365 F123	BFT41	TO5	NPN	60	50	5	100	300	100	100	
BS9365 F124	BFT60	TO5	PNP	80	35	6	30	—	150	60	} High Current Amplifiers
BS9365 F125	BFT61	TO5	PNP	60	30	6	40	—	150	50	
BS9365 F126	BFT62	TO5	PNP	40	20	6	60	—	150	50	
BS9365 F127	BFT79	TO5	PNP	90	80	5	50	250	100	100	} High Current Amplifiers
BS9365 F128	BFT80	TO5	PNP	70	60	5	75	250	100	100	
BS9365 F129	BFT81	TO5	PNP	60	50	5	100	300	100	100	
BS9365 F134	BCW34	TO18	NPN	60	45	5	100	350	10	150	} Complementary Low Noise Amplifiers
BS9365 F135	BCW35	TO18	PNP	60	45	5	100	350	10	150	
BS9365 F136	BC177	TO18	PNP	50	45	6	60	300	2	150	} Low Level General Purpose Amplifiers
BS9365 F136	BC178	TO18	PNP	35	25	6	80	400	2	150	
BS9365 F136	BC179	TO18	PNP	35	25	6	140	900	2	150	
BS9365 F168	BF257	TO5	NPN	160	160	5	25	—	30	40	} Very High Voltage Amplifiers
BS9365 F168	BF258	TO5	NPN	250	250	5	25	—	30	40	
BS9365 F168	BF259	TO5	NPN	300	300	5	25	—	30	40	
BS9365 F184	2N4036	TO5	PNP	90	65	7	40	140	150	60	
BS9365 F184	2N4037	TO5	PNP	60	40	7	50	250	150	60	
BS9365 F185	2N4030	TO5	PNP	60	60	5	40	120	100	100	} Medium Power Amplifier/Switch Specified to 1A
BS9365 F185	2N4031	TO5	PNP	80	80	5	40	120	100	100	
BS9365 F185	2N4032	TO5	PNP	60	60	5	100	300	100	150	
BS9365 F185	2N4033	TO5	PNP	80	80	5	100	300	100	150	
BS9365 F190	2N4026	TO18	PNP	60	60	5	40	120	100	100	
BS9365 F190	2N4027	TO18	PNP	80	80	5	40	120	100	100	} Medium Power Amplifier/Switch Specified to 1A
BS9365 F190	2N4028	TO18	PNP	60	60	5	100	300	100	150	
BS9365 F190	2N4029	TO18	PNP	80	80	5	100	300	100	150	