



## Small Signal Planar CV (continued)

CV Number	Commercial Equivalent	Case Outline	Polarity	Absolute Maximum Rating			hFE at Collector Current			Min. ft MHz	Converted to BS9300		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				
CV7722	BFY50	TO5	NPN	80	35	6	30	100	150	50	●	} General purpose Amplifier	
CV7723	BFY51	TO5	NPN	60	30	6	40	120	150	50	●		
CV7724	BFY52	TO5	NPN	40	20	6	60	200	150	50	●		
CV7725	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 General Purpose Amplifier High Voltage Amplifier	
CV7726	BFY51	TO5	NPN	60	30	6	35	—	150	50	●		
CV7727	BFY52	TO5	NPN	40	20	6	50	—	150	50	●		
CV7735	2N1711	TO5	NPN	75	50	7	100	300	150	70	●		
CV7738	2N2484	TO18	NPN	60	60	6	100	500	0.01	60	●		
CV7774	2N2194	TO5	NPN	60	40	5	20	60	150	50	●		
CV7775	2N2243A	TO5	NPN	120	80	7	40	120	150	50	●		
CV7748	2N2221*	TO18	NPN	25	25	4	38	162	10	120	●		} High Frequency, Low Power Switching and Amplifier Applications. Fully Complementary Range  } High Frequency, Medium Power NPN Amplifier and High Current Switches  } TO18 Version of CV7763-66  } Low Level PNP Amplifier Medium Power PNP Amplifier and Switch Low Level PNP Amplifier and Switch Medium Power PNP Amplifier and Switch
CV7749	2N2906*	TO18	PNP	25	25	4	38	162	10	120	●		
CV7750	2N2221A*	TO18	NPN	45	35	4	38	162	10	120	●		
CV7751	2N2906A*	TO18	PNP	45	35	4	38	162	10	120	●		
CV7752	2N2222A*	TO18	NPN	45	35	4	75	250	10	120	●		
CV7753	2N2907A*	TO18	PNP	45	35	4	75	250	10	120	●		
CV7754	2N2222*	TO18	NPN	25	25	4	75	250	10	120	●		
CV7755	2N2907*	TO18	PNP	25	25	4	75	250	10	120	●		
CV7763	2N2218	TO5	NPN	60	30	5	40	120	150	250	●		
CV7764	2N2219	TO5	NPN	60	30	5	100	300	150	250	●		
CV7765	2N2218A	TO5	NPN	75	40	6	40	120	150	250	●		
CV7766	2N2219A	TO5	NPN	75	40	6	100	300	150	250	●		
CV7767	2N2221	TO18	NPN	60	30	5	40	120	150	250	●		
CV7768	2N2222	TO18	NPN	60	30	5	100	300	150	250	●		
CV7769	2N2221A	TO18	NPN	75	40	6	40	120	150	250	●		
CV7770	2N2222A	TO18	NPN	75	40	6	100	300	150	250	●		
CV9023	BCY72*	TO18	PNP	25	20	3	30	—	10	150	●		
CV9507	BFX29*	TO5	PNP	65	65	5	50	—	10	100	●		
CV9543	BCY70	TO18	PNP	25	20	5	35	—	10	100	●		
CV9790	BFX29	TO5	PNP	60	60	5	50	200	10	100	●		

## High Current NPN Amplifiers

Device Type	Polarity	Case	Maximum ratings				hFE1		hFE2			ft 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	V	V		
BFT39	NPN	TO39	90	80	5	1000	100	50	250	1000	20	—	100	1.0	1.6	BFT29	hFE 25 min at 1mA hFE 45 min at 1mA hFE 45 min at 1mA
BFT40	NPN	TO39	70	60	5	1000	100	75	250	1000	25	—	100	1.0	1.0	BFT30	
BFT41	NPN	TO39	60	50	5	1000	100	100	300	1000	25	—	100	1.0	1.0	BFT31	
BFY50	NPN	TO39	80	35	6	1000	150	30	—	1000	15	—	60	1.0	1.0	BFT53	hFE 20 min at 10mA hFE 30 min at 10mA hFE 30 min at 10mA
BFY51	NPN	TO39	60	30	6	1000	150	40	—	1000	15	—	50	1.0	1.6	BFT54	
BFY52	NPN	TO39	40	20	6	1000	150	60	—	1000	15	—	50	1.0	1.6	BFT55	
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 Ic=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			ft 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	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 hFE 20 min at 50µA hFE 25 min at 100mA
2N2412	PNP	TO18	25	20	5	300	10	40	120	50	20	—	140	10	0.20	25	90	100	
2N2894	PNP	TO18	12	12	4	200	10	30	—	30	40	150	400	10	0.15	60	—	90	
2N3012	PNP	TO18	12	12	4	200	10	25	—	30	30	120	400	10	0.15	60	—	75	} hFE 30 min at 100mA VCE(sat) 0.5V max at 100mA hFE 25 min at 100mA
2N3576	PNP	TO18	20	15	5	200	10	40	120	100	10	—	400	10	0.15	30	30	50	
2N3829	PNP	TO52	35	20	20	500	10	25	—	30	30	120	350	10	0.18	25	50	65	
2N4260	PNP	TO72	15	15	45	30	10	30	150	30	20	—	1600	10	0.35	1.2	—	1.2	