

Low Power Bipolar Transistors – Leaded  
(P<sub>tot</sub> to 1.0W) — continued

TO-92 General Purpose Amplifiers/Switches, NPN

V <sub>ceo</sub> V	V <sub>cho</sub> max. V	I <sub>c</sub> A	h <sub>fe</sub> min.	I <sub>c</sub> @ mA	f <sub>r</sub> min. MHz	P <sub>tot</sub> mW	Package	Mfrs. List No.
15	50	0.2	40	10	—	625	TO-92(d)	ON MPS2369ZL1
20	30	0.1	125	2	150	300	TO-92(f)	— BC238
20	25	1.0	85	500	65	625	TO-92(a)	ON BC368
25	30	0.1	380	2	150	350	TO-92(d)	ON BC239C
25	30	0.2	120	2	300	625	TO-92(b)	ON 2N4124
25	30	0.2	120	2	300	625	TO-92(b)	FCH 2N4124
25	30	0.8	250	100	210*	625	TO-92(d)	ON BC338-25ZL1
30	30	0.03	100	0.01	100	360	TO-92(a)	— 2N3707
30	45	0.1	120	2	150	350	TO-92(d)	ON BC183
30	30	0.1	200	2	200	625	TO-92(d)	ON BC548B
30	45	0.1	250	2	150	350	TO-92(d)	ON BC184
30	30	0.1	420	2	200	625	TO-92(d)	ON BC548C
30	45	0.2	125	2	150	625	TO-92(f)	FCH BC183
30	45	0.2	240	2	150	625	TO-92(a)	FCH BC184L
30	45	0.2	240	2	150	625	TO-92(f)	FCH BC184
30	45	0.2	450	2	150	625	TO-92(a)	FCH BC183LC
30	45	0.2	450	2	150	625	TO-92(a)	FCH BC184LC
30	45	0.2	450	2	150	625	TO-92(f)	FCH BC183C
30	45	0.2	450	2	150	625	TO-92(f)	FCH BC184C
30	50	0.8	50	50	100	625	TO-92(a)	— 2N3705
30	50	0.8	100	50	100	360	TO-92(a)	— 2N3704
40	75	0.6	100	150	300	625	TO-92(b)	ON MPS2222A
40	60	2.0	75	1000	75*	625	TO-92(b)	ON MPS650
45	50	0.1	110	2	200	625	TO-92(d)	ON BC547A
45	50	0.1	120	2	200	350	TO-92(d)	ON BC237
45	50	0.1	200	2	200	350	TO-92(d)	ON BC237B
45	50	0.1	200	2	200	625	TO-92(d)	ON BC547B
45	50	0.1	200	2	300*	500	TO-92(f)	FCH BC547B
45	50	0.1	350	2	150	625	TO-92(f)	FCH BC237B
45	50	0.1	380	2	150	350	TO-92(d)	ON BC237CZL1
45	50	0.1	420	2	200	625	TO-92(d)	ON BC547C
45	50	0.5	100	100	200*	800	TO-92(f)	FCH BC337
45	50	0.8	100	100	60	625	TO-92(d)	ON BC337
45	50	0.8	160	100	60	625	TO-92(d)	ON BC337-25
45	50	0.8	250	100	210*	625	TO-92(d)	ON BC337-40ZL1
45	50	1.0	100	100	—	625	TO-92(f)	FCH BC337-16
50	50	2.0	70	500	100*	900	TO-92(a)**	TOSH 2SC2655
50	60	0.1	120	2	150	350	TO-92(d)	ON BC182
50	60	0.1	120	2	120	350	TO-92(d)	ON BC182B
50	60	0.15	70	2	80	400	TO-92(a)	TOSH 2SC1815
50	60	0.2	125	2	150	625	TO-92(a)	FCH BC182L
50	60	0.2	125	2	150	625	TO-92(a)	FCH BC182LA
50	60	0.2	125	2	150	300	TO-92(f)	FCH BC182
50	60	0.2	240	2	150	625	TO-92(a)	FCH BC182LB
50	60	0.2	240	2	150	625	TO-92(f)	FCH BC182B
65	80	0.1	110	2	300*	500	TO-92(f)	FCH BC546
65	80	0.1	200	2	150	625	TO-92(d)	ON BC546B
80	80	0.5	60	100	100	625	TO-92(d)	ON BC489
80	100	1.5	40	150	130*	625	TO-92(f)	FCH BC639
100	100	2.0	20*	1000	—	800	TO-92(a)	PI TIPP31C
160	180	0.6	80	10	100	350	TO-92(b)	FCH 2N5551
300	300	0.1	20	4	50	900	TO-92(a)**	TOSH 2SC2482

\*\* Denotes modified TO-92 package, body height = 8.2 max.

SD17 / SD17A

Order Multiple=5	Order Code	5+	25+	100+	1K+	3K+
Mfrs. List No.						
BC182 (FCH)	356-487					
BC182 (ON)	933-740					
BC182B (FCH)	356-517					
BC182B (ON)	933-739					
BC182L	356-529					
BC182LA	356-530					
BC182LB	356-542					
BC183 (FCH)	356-554					
BC183 (ON)	933-752					
BC183C	356-580					
BC183LC	356-610					
BC184 (FCH)	356-621					
BC184 (ON)	933-764 †					
BC184C	356-657					
BC184L	356-669					
BC184LC	356-670					
BC237	356-852					
BC237B (FCH)	434-565					
BC237B (ON)	356-864					
BC237CZL1	992-768					
BC238	356-876					
BC239C	992-770					
BC337 (FCH)	434-607					
BC337 (ON)	933-727					
BC337-16	434-772					
BC337-25	933-806					
BC337-40ZL1	992-781					
BC338-25ZL1	992-793					
BC368	933-594					
BC489	933-612					
BC546	434-784					
BC546B	933-880					
BC547A	933-831					
BC547B (FCH)	434-632					
BC547B (ON)	933-892					
BC547C	933-909					
BC548B	933-910					
BC548C	933-922					
BC639	434-735					
MPS2222A	682-214					

continued

Order Multiple=5

Mfrs. List No.	Order Code	5+	25+	100+	1K+	3K+
MPS2369ZL1	236-652					
MPS650	933-648					
TIPP31C	357-820					
2N3704	358-745					
2N3705	358-757					
2N3707	358-770 †					
2N4124 (FCH)	358-927					
2N4124 (ON)	334-3297					
2N5551	359-105					
2SC1815	327-2059					
2SC2482	327-2060					
2SC2655	327-2072					

† Available until stocks are exhausted

TO-92 General Purpose Amplifiers/Switches, PNP

V <sub>ceo</sub> V	V <sub>cho</sub> max. V	I <sub>c</sub> A	h <sub>fe</sub> min.	I <sub>c</sub> @ mA	f <sub>r</sub> min. MHz	P <sub>tot</sub> mW	Package	Mfrs. List No.
20	25	1.0	85	500	65	625	TO-92(a)	ON BC369
25	25	0.2	120	2	250	625	TO-92(b)	FCH 2N4126
30	30	0.1	180	2	75	625	TO-92(d)	ON BC558B
30	50	0.1	220	2	300*	625	TO-92(f)	FCH BC557B
30	45	0.2	80	2	200	625	TO-92(a)	FCH BC213L
30	45	0.2	140	2	200	625	TO-92(d)	ON BC214
30	45	0.2	140	2	200	625	TO-92(f)	FCH BC214
30	45	0.2	140	2	200	625	TO-92(a)	FCH BC214L
30	50	0.2	30	50	100	360	TO-92(a)	— 2N3703
40	40	0.6	100	150	200	625	TO-92(b)	FCH 2N4403
40	60	2.0	75	1	75	625	TO-92(b)	ON MPS750RLRP
45	50	0.1	120	2	75	625	TO-92(d)	ON BC557A
45	50	0.1	180	2	75	625	TO-92(d)	ON BC557B
45	50	0.1	200	2	280*	350	TO-92(d)	ON BC307B
45	50	0.5	100	100	100*	800	TO-92(f)	FCH BC327
45	50	0.8	160	100	60	625	TO-92(d)	ON BC327-25
45	50	1.0	100	100	—	625	TO-92(f)	FCH BC327-16
45	50	0.1	380	2	250*	625	TO-92(b)	ON BC560CZL1
45	50	0.1	420	2	320*	625	TO-92(d)	ON BC557CZL1
45	45	1.5	40	150	50*	1000	TO-92(f)	FCH BC636
50	60	0.1	140	2	200	350	TO-92(d)	ON BC212B
50	60	0.2	60	2	200	625	TO-92(a)	FCH BC212L
50	60	0.2	60	2	200	625	TO-92(f)	FCH BC212
50	60	0.2	200	2	200	625	TO-92(a)	FCH BC212LB
50	60	0.2	200	2	200	625	TO-92(f)	FCH BC212B
60	60	0.6	100	10	200*	625	TO-92(d)	ON MPS2907AZL1
60	60	2.0	20*	1000	—	800	TO-92(a)	PI TIPP32A
60	80	2.0	75	1	75	625	TO-92(d)	ON MPS751ZL1
65	80	0.1	75	2	200*	625	TO-92(f)	FCH BC556
65	80	0.1	180	2	150	500	TO-92(d)	ON BC556B
80	80	0.5	100	50	50	1000	TO-92(d)	ON MPSW56
80	100	1.5	40	150	130*	625	TO-92(f)	FCH BC640
100	100	2.0	20*	1000	—	800	TO-92(a)	PI TIPP32C
150	160	0.6	60	10	100	625	TO-92(b)	FCH 2N5401

SD19

Order Multiple=5

Mfrs. List No.	Order Code	5+	25+	100+	1K+	3K+
BC212	356-682					
BC212B (FCH)	356-700					
BC212B (ON)	933-776					
BC212L	356-712					
BC212LB	356-724					
BC213L	356-773					
BC214 (FCH)	356-797					
BC214 (ON)	933-788					
BC214L	356-839					
BC307B	356-890					
BC327	434-589					
BC327-16	434-590					
BC327-25	933-790					
BC369	933-600					
BC556	434-693					
BC556B	933-820					
BC557A	933-843					
BC557B (FCH)	434-840					
BC557B (ON)	933-855					
BC557CZL1	992-823					
BC558B	933-703					
BC560CZL1	992-847					
BC636	357-212					
BC640	434-747					
MPS2907AZL1	236-664					
MPS750RLRP	236-676					
MPS751ZL1	236-688					
MPSW56	NEW 352-6495					
TIPP32A	357-832 †					
TIPP32C	357-844					
2N3703	358-733 †					
2N4126	358-940					
2N4403	359-002					
2N5401	359-087					

† Available until stocks are exhausted