

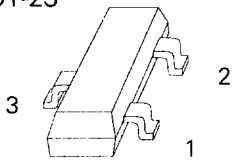
Transistors

General Purpose and Switching

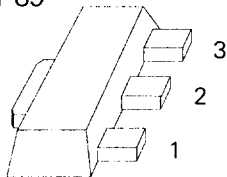
For complete package outlines, refer to pages PO-1 through PO-6

Type N=NPN P=PNP	Maximum Ratings				Characteristics ($T_A=25^\circ\text{C}$)								Case		Leaded. Equiv.	
	V_{CE0} V	I_C mA	P_t mW	f_T MHz	I_{CBO} at V_{CBO} nA	V_{CBO} V	h_{FE} at I_C mA	V_{CE} V	$V_{CE(sat)}$ at I_C V	I_C mA	I_B mA	Style	Lead Code			
BC807	P	45	1000	330	200	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT23	8	BC327
BC807W	P	45	1000	330	200	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT323	8	BC327
BC808	P	25	1000	330	200	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT23	8	BC328
BC808W	P	25	1000	330	200	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT323	8	BC328
BC817	N	45	1000	330	170	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT23	7	BC337
BC817W	N	45	1000	330	170	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT323	7	BC337
BC818	N	25	1000	330	170	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT23	7	BC338
BC818W	N	25	1000	330	170	≤ 100	25	100-630*	100	1	≤ 0.70	500	50	SOT323	7	BC338
BC846	N	65	200	330	250	≤ 15	30	110-450*	2	5	≤ 0.60	100	5	SOT23	7	BC546
BC846W	N	65	200	330	250	≤ 15	30	110-450*	2	5	≤ 0.60	100	5	SOT323	7	BC546
BC847	N	45	200	330	250	≤ 15	30	110-800*	2	5	≤ 0.60	100	5	SOT23	7	BC547
BC847W	N	45	200	330	250	≤ 15	30	110-800*	2	5	≤ 0.60	100	5	SOT323	7	BC547
BC848	N	30	200	330	250	≤ 15	30	110-800*	2	5	≤ 0.60	100	5	SOT23	7	BC548
BC848W	N	30	200	330	250	≤ 15	30	110-800*	2	5	≤ 0.60	100	5	SOT323	7	BC548
BC849	N	30	200	330	250	≤ 15	30	200-800*	2	5	≤ 0.60	100	5	SOT23	7	BC549
BC849W	N	30	200	330	250	≤ 15	30	200-800*	2	5	≤ 0.60	100	5	SOT323	7	BC549
BC850	N	45	200	330	250	≤ 15	30	200-800*	2	5	≤ 0.60	100	5	SOT23	7	BC550
BC850W	N	45	200	330	250	≤ 15	30	200-800*	2	5	≤ 0.60	100	5	SOT323	7	BC550
BC856	P	65	200	330	250	≤ 15	30	125-475*	2	5	≤ 0.60	100	5	SOT23	8	BC556
BC856W	P	65	200	330	250	≤ 15	30	125-475*	2	5	≤ 0.60	100	5	SOT323	8	BC556
BC857	P	45	200	330	250	≤ 15	30	125-800*	2	5	≤ 0.60	100	5	SOT23	8	BC557
BC857W	P	45	200	330	250	≤ 15	30	125-800*	2	5	≤ 0.60	100	5	SOT323	8	BC557
BC858	P	30	200	330	250	≤ 15	30	125-800*	2	5	≤ 0.60	100	5	SOT23	8	BC558
BC858W	P	30	200	330	250	≤ 15	30	125-800*	2	5	≤ 0.60	100	5	SOT323	8	BC558
BC859	P	30	200	330	250	≤ 15	30	125-800*	2	5	≤ 0.60	100	5	SOT23	8	BC559
BC859W	P	30	200	330	250	≤ 15	30	125-800*	2	5	≤ 0.60	100	5	SOT323	8	BC559
BC860	P	45	200	330	250	≤ 15	30	220-800*	2	5	≤ 0.60	100	5	SOT23	8	BC560
BC860W	P	45	200	330	250	≤ 15	30	220-800*	2	5	≤ 0.60	100	5	SOT323	8	BC560
BCP51	P	45	1500	1500	125	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT223	21	BC636
BCP52	P	60	1500	1500	125	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT223	21	BC638
BCP53	P	80	1500	1500	125	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT223	21	BC648
BCP54	N	45	1500	1500	100	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT223	22	BC635
BCP55	N	60	1500	1500	100	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT223	22	BC637
BCP56	N	80	1500	1500	100	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT223	22	BC639
BCP68	N	20	2000	1500	100	≤ 100	25	63-400	500	1	≤ 0.50	1000	100	SOT223	22	BC368
BCP69	P	20	2000	1500	100	≤ 100	35	63-400	500	1	≤ 0.50	1000	100	SOT223	21	BC369
BCW60	N	32	200	330	250	≤ 20	32	120-630*	2	5	≤ 0.25	10	0.25	SOT23	7	BCX58
BCW61	P	32	200	330	170	≤ 20	32	100-630*	100	1	≤ 0.70	500	50	SOT23	7	BCX73
BCW66	N	45	1000	330	170	≤ 20	45	100-630*	100	1	≤ 0.70	500	50	SOT23	7	BCX74
BCW67	P	32	1000	330	200	≤ 20	32	100-630*	100	1	≤ 0.70	500	50	SOT23	8	BCX75
BCW68	P	45	1000	330	200	≤ 20	45	100-630*	100	1	≤ 0.70	500	50	SOT23	8	BCX76
BCX41	N	125	1000	330	100	≤ 100	100	≥ 63	100	1	≤ 0.90	300	30	SOT23	7	-
BCX42	P	125	1000	330	150	≤ 100	100	≥ 63	100	1	≤ 0.90	300	30	SOT23	8	-
BCX51	P	45	1500	1000	125	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT89	23	BC636
BCX52	P	60	1500	1000	125	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT89	23	BC638
BCX53	P	80	1500	1000	125	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT89	23	BC640
BCX54	N	45	1500	1000	100	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT89	10	BC635

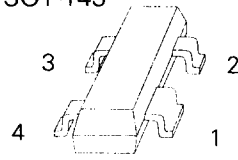
SOT-23



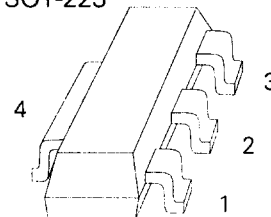
SOT-89



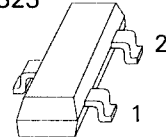
SOT-143



SOT-223



SOT-323



Transistors

General Purpose and Switching - continued

For complete package outlines, refer to pages PO-1 through PO-6

Type		Maximum Ratings			Characteristics ($T_A = 25^\circ\text{C}$)								Case			
N=NPN	P=PNP	V_{CEO}	I_C	P_t	f_T	I_{CBO} at V_{CBO}	I_{CEX} at V_{CEX}	h_{FE} at I_C	V_{CE}	$V_{CE(sat)}$ at I_C	I_B	Style	Lead Code	Leaded. Equiv.		
		V	mA	mW	MHz	nA	nA	mA	V	V	mA					
BCX55	N	60	1500	1000	100	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT89	10	BC637
BCX56	N	80	1500	1000	100	≤ 100	30	40-250*	150	2	≤ 0.50	500	50	SOT89	10	BC639
BCX68	N	20	2000	1000	100	≤ 100	25	63-400*	500	1	≤ 0.50	1000	100	SOT89	10	BC368
BCX69	P	20	2000	1000	100	≤ 100	25	63-400*	500	1	≤ 0.50	1000	100	SOT89	23	BC369
BCX70	N	45	200	330	250	≤ 20	45	120-630*	2	5	≤ 0.25	10	0.25	SOT23	7	BCX59
BCX71	P	45	200	330	250	≤ 20	45	120-630*	2	5	≤ 0.25	10	0.25	SOT23	8	BCX79
BSS63	P	100	1000	330	150	≤ 100	80	≥ 30	10	5	≤ 0.25	25	2.50	SOT23	8	-
BSS64	N	80	1000	330	100	≤ 100	80	80	10	1	≤ 0.70	4	0.40	SOT23	7	-
BSS79	N	40	1000	330	250	≤ 10	60	40-300*	150	10	≤ 1.30	500	50	SOT23	7	-
BSS80	P	40	1000	330	250	≤ 10	50	40-300*	150	10	≤ 1.60	500	50	SOT23	8	-
BSS81	N	35	1000	330	250	≤ 10	60	40-300*	150	10	≤ 1.30	500	50	SOT23	7	-
BSS82	P	60	1000	330	250	≤ 10	50	40-300*	150	10	≤ 1.60	500	50	SOT23	8	-
PZT2222	N	30	600	1500	200	≤ 20	50	100-300	150	10	≤ 0.40	150	15	SOT223	22	-
PZT2222A	N	40	600	1500	200	≤ 10	50	100-300	150	10	≤ 0.30	150	15	SOT223	22	-
PZT2907	P	40	600	1500	200	≤ 20	50	100-300	150	10	≤ 0.40	150	15	SOT223	21	-
PZT2907A	P	60	600	1500	200	≤ 10	50	100-300	150	10	≤ 0.40	150	15	SOT223	21	-
PZT3904	N	40	200	1500	300	≤ 50	30	100-300	10	1	≤ 0.30	50	5	SOT223	22	-
PZT3906	P	40	200	1500	250	≤ 50	30	100-300	10	1	≤ 0.40	50	5	SOT223	21	-
SMBT2222	N	30	600	330	250	≤ 10	50	100-300	150	10	≤ 0.40	150	15	SOT23	7	-
SMBT2222A	N	40	600	330	300	≤ 10	60	100-300	150	10	≤ 0.30	150	15	SOT23	7	-
SMBT2907	P	40	600	330	200	≤ 20	50	100-300	150	10	≤ 0.40	150	15	SOT23	8	-
SMBT2907A	P	60	600	330	200	≤ 10	50	100-300	150	10	≤ 0.40	150	15	SOT23	8	-
SMBT3904	N	40	200	330	300	≤ 50	30	100-300	10	1	≤ 0.30	50	5	SOT23	7	-
SMBT3906	P	40	200	330	250	≤ 50	30	100-300	10	1	≤ 0.40	50	5	SOT23	8	-
SMBT4124	N	25	200	330	300	≤ 50	20	120-360	2	1	≤ 0.30	50	5	SOT23	7	-
SMBT4126	P	25	200	330	250	≤ 50	20	120-360	2	1	≤ 0.40	50	5	SOT23	8	-
SMBT5086	P	50	50	330	40	≤ 50	35	≥ 150	10	5	≤ 0.30	10	1	SOT23	8	BC212
SMBT5087	P	50	50	330	40	≤ 50	35	≥ 250	10	5	≤ 0.30	10	1	SOT23	8	BC212
SMBT6428	N	50	200	330	100	≤ 10	30	≥ 250	10	5	≤ 0.60	100	5	SOT23	7	BC182
SMBT6429	N	45	200	330	100	≤ 10	30	≥ 500	10	5	≤ 0.60	100	5	SOT23	7	BC182
SMBTA05	N	60	500	330	100	≤ 100	60	≥ 100	100	1	≤ 0.25	100	10	SOT23	7	-
SMBTA06	N	80	500	330	100	≤ 100	80	≥ 100	100	1	≤ 0.25	100	10	SOT23	7	-
SMBTA20	N	40	200	330	125	≤ 100	30	40-400	5	10	≤ 0.25	10	1	SOT23	7	-
SMBTA55	P	60	500	330	100	≤ 100	60	≥ 100	100	1	≤ 0.25	100	10	SOT23	8	-
SMBTA56	P	80	500	330	100	≤ 100	80	≥ 100	100	1	≤ 0.25	100	10	SOT23	8	-
SMBTA70	P	40	200	330	125	≤ 100	30	40-400	5	10	≤ 0.25	10	1	SOT23	8	-
SXT2222A	N	40	600	1000	300	≤ 10	60	100-300	150	10	≤ 0.30	150	15	SOT89	10	-
SXT2907A	P	60	600	1000	200	≤ 10	60	100-300	150	10	≤ 0.40	150	15	SOT89	23	-
SXT3904	N	40	200	1000	300	≤ 50	30	100-300	10	1	≤ 0.30	50	5	SOT89	10	-
SXT3906	P	40	200	1000	250	≤ 50	30	100-300	10	1	≤ 0.40	50	5	SOT89	23	-

*Available in h_{FE} sub groups. See foldout for description.

Current-Mirror Transistors

Type		Maximum Ratings			Characteristics ($T_A = 25^\circ\text{C}$)								Case			
N=NPN	P=PNP	V_{CEO}	I_C	P_t	f_T	I_{CBO} at V_{CBO}	I_{CEX} at V_{CEX}	h_{FE} at I_C	V_{CE}	$V_{CE(sat)}$ at I_C	I_B	Style	Lead Code	Leaded. Equiv.		
		V	mA	mW	MHz	nA	nA	mA	V	V	mA					
BCV61	N	30	200	300	250	≤ 15	30	110-800*	2	5	≤ 0.60	100	5	SOT143	24	-
BCV62	P	30	200	300	250	≤ 15	30	125-800*	2	5	≤ 0.65	100	5	SOT143	25	-