

# TO-92 Plastic Package Transistors (NPN)

Maximum Ratings							Electrical Characteristics (Ta=25°C, Unless Otherwise Specified)																
Type No.	V <sub>CBO</sub> (V)	V <sub>CEO</sub> (V)	V <sub>EBO</sub> (V)	P <sub>D</sub> (W)	I <sub>C</sub> (A)	I <sub>CBO</sub> (μA)	V <sub>CB</sub> (V)	I <sub>CES</sub> (μA)	V <sub>CE</sub> (V)	h <sub>FE</sub>	I <sub>C</sub> & V <sub>CE</sub>	V <sub>CE(SAT)</sub> (V)	V <sub>BE(SAT)</sub> (V)	I <sub>C</sub>	C <sub>ob</sub> (pF)	f <sub>t</sub> (MHz)	I <sub>C</sub>	t <sub>on</sub> (ns)	N <sub>F</sub> (dB)	Freq (MHz)	C <sub>in</sub> (pF)	CDIL Case Style	
	Min	Min	Min	@Tc=25°C	(A)	Max	(V)	Max	(V)	Min	Max	Max	Max	(mA)	Typ	Max	Min	Typ	Max	Max	Max	Max	
2SC1740	50	40	5	0.3	0.1	0.5	30			120 25	820 150	1 6	0.4	1	50	2	3.5	180	2		10		TO-92-1
2SC1740S	50	40	5	0.3	0.1	0.5	30			270 25	560 150	1 6	0.4	1	50	2	3.5	180	2		10		TO-92-1
2SC1815	60	50	5	0.4	0.15	0.1	60			70 25	700 150	2 6	0.25	1	100	3.0	80	1		10	0.001		TO-92-1
2SC1815BL	60	50	5	0.4	0.15	0.1	60			350 25	700 150	2 6	0.25	1	100	3.0	80	20		10			TO-92-1
2SC1815GF	60	50	5	0.4	0.15	0.1	60			200 25	400 150	2 6	0.25	1	100	3	80	1		10	0.001		TO-92-1
2SC1815O	60	50	5	0.4	0.15	0.1	60			70 25	140 150	2 6	0.25	1	100	3	80	1		10	0.001		TO-92-1
2SC1815Y	60	50	5	0.4	0.15	0.1	60			120 25	240 150	2 6	0.25	1	100	3	80	1		10	0.001		TO-92-1
2SC1906	30	19	2	0.3	0.05	0.5	10			40	10	10	1		20	1.2	600	1000	10				TO-92-1
2SC1906Y	30	19	2	0.3	0.05	0.5	10			120	240	10	10	1	20	1.2	600	1000	10				TO-92-1
2SC1959	35	30	5	0.5	0.5	0.1	35			70 25	240 400	100 6	0.25		100	7		300	20				TO-92-1
2SC1959O	35	30	5	0.5	0.5	0.1	35			70 25	140 400	100 6	0.25		100	7		300	20				TO-92-1
2SC1959Y	35	30	5	0.5	0.5	0.1	35			120 25	240 400	100 6	0.25		100	7		300	20				TO-92-1
2SC2002	60	60	5	0.5	0.3	0.1	60			90 30	400 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2002K	60	60	5	0.5	0.3	0.1	60			200 30	400 300	50 1	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2002L	60	60	5	0.5	0.3	0.1	60			135 30	270 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2002M	60	60	5	0.5	0.3	0.1	60			90 30	180 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2003	80	80	5	0.5	0.3	0.1	80			90 30	400 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2003K	80	80	5	0.5	0.3	0.1	80			200 30	400 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2003L	80	80	5	0.5	0.3	0.1	80			135 30	270 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2003M	80	80	5	0.5	0.3	0.1	80			90 30	180 300	50 2	0.6	1.2	300	7	15	50	140	10			TO-92-1
2SC2216	50	45	4	0.3	0.05	0.1	50			40	100	12.5	12.5	0.2	1.5	15	2	300		13			TO-92-3
2SC2271	300	300	6	0.9	0.1	1	200			40	200	10	10	0.6	1	20	7.5	50		10			TO-92-1
2SC2271C	300	300	6	0.9	0.1	1	200			40	80	10	10	0.6	1	20	7.5	50		10			TO-92-1
2SC2271D	300	300	6	0.9	0.1	1	200			60	120	10	10	0.6	1	20	7.5	50		10			TO-92-1
2SC2271E	300	300	6	0.9	0.1	1	200			100	200	10	10	0.6	1	20	7.5	50		10			TO-92-1