

Applications		Type No		Electrical Characteristics (Ta = 25°C)										Package						
				Maximum Ratings					MIN							MAX				
				V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	P <sub>C</sub> (mW)	h <sub>FE</sub>	V <sub>CE</sub> (sat)(V)	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)			V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	G <sub>VE</sub> (dB)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)
VIII RI	NPN	30	20	250	20~200	10	2	—	—	—	400	2	20~28	10	0	0	F3			
	PNP	15	50	150	40~200	3	8	—	—	—	650	8	*1.3	*10	—	1	F1			
VIII OSC	NPN	15	50	250	(20)	3	8	—	—	—	600	8	*1.5	*10	—	1	F3			
	PNP	15	100	300	(20)	1	3	0.4	10	1	600	4	*1.7	*10	—	1	F1			
VIII OSC	NPN	15	50	250	(20)	3	8	—	—	—	650	8	*1.5	*10	—	1	F3			
	PNP	15	50	150	40~200	10	5	—	—	—	1,500	2	*0.9	10	—	800	F1			
VIII OSC	NPN	15	50	150	60~120	1	8	—	—	—	1,100	8	*1.3	*10	—	1	F1			
	PNP	25	50	150	20~200	10	10	0.2	15	1.5	250	10	*1.6	*10	—	1	F1			
IX PH	NPN	40	50	250	(30)	10	4	—	—	—	400	4	32~40	12	4	1	F3			
	PNP	25	50	300	20~200	12.5	12.5	0.2	15	1.5	300	12.5	28~36	12.5	12.5	45	F3			
	PNP	25	50	300	20~200	12.5	12.5	0.2	15	1.5	300	12.5	28~36	12.5	12.5	45	F3			

\*C<sub>ob</sub>, \*C<sub>ce</sub>, \*V<sub>CE</sub>

Applications		Type No		Electrical Characteristics (Ta = 25°C)										Package						
				Maximum Ratings					MIN							TYP				
				V <sub>CE</sub> (V)	I <sub>C</sub> (A)	P <sub>C</sub> (W)	h <sub>FE</sub>	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)			V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)	C <sub>ob</sub> (PF)
IX Vertical Output	NPN	30	2	1	100~320	2	500	2.0	1.5A	30	120	2	500	2	10	1	F4			
	PNP	30	1	1.5	40~400	2	500	0.8	2A	0.2A	100	2	500	2	10	1	F7			
IX Vertical Output	NPN	150	1.5	20	40~140	10	500	1.5	500	50	4	10	500	5	10	1	F7			
	PNP	60	3	25	60~300	5	500	1.0	3A	0.3A	3.0	5	500	5	10	1	F7			
IX Vertical Output	NPN	60	3	25	60~300	5	500	1.0	3A	0.3A	9	5	500	5	10	1	F7			
	PNP	30	3	10	70~240	2	500	0.8	2A	0.2A	100	2	500	2	10	1	F6			
IX Vertical Output	NPN	60	3	25	60~300	5	500	1.0	3A	0.3A	3.0	5	500	5	10	1	F6			
	PNP	60	3	30	60~200	5	500	1.0	3A	0.3A	9	5	500	5	10	1	F6			
IX Vertical Output	NPN	150	1.5	25	40~140	10	500	1.5	500	50	4	10	500	10	35	10	F6			
	PNP	150	1.5	25	40~140	10	500	1.5	500	50	4	10	500	10	35	10	F6			