

SMALL-SIGNAL TRANSISTORS & DIODES & MEDIUM-POWER RECTIFIERS

Small-signal FETs

N-CHANNEL JUNCTION FETs FOR SWITCHING

type number	ratings		characteristics								package
	$\pm V_{DS}$ max. (V)	I_G max. (mA)	I_{DSS}		$-V_{(P)GS}$		$R_{DS(on)}^{1)}$ max. (Ω)	$t_{on}^{2)}$ max. (ns)	$t_{off}^{3)}$ max. (ns)	C_{is} max. (pF)	
			min. (mA)	max. (mA)	min. (V)	max. (V)					
LEADED TYPES											
BSV78	40	50	50	-	3.75	11	25	10	10	10	TO-18
BSV79	40	50	20	-	2	7	40	18	16	10	TO-18
BSV80	40	50	10	-	1	5	60	30	32	10	TO-18
J108	25	50	80	-	3	10	8	4 ⁴⁾	6 ⁴⁾	15	TO-92
J109	25	50	40	-	2	6	12	4 ⁴⁾	6 ⁴⁾	15	TO-92
J110	25	50	10	-	0.5	4	18	4 ⁴⁾	6 ⁴⁾	15	TO-92
J111	40	50	20	-	3	10	30	13 ⁴⁾	35 ⁴⁾	28	TO-92
J112	40	50	5	-	1	5	50	13 ⁴⁾	35 ⁴⁾	28	TO-92
J113	40	50	2	-	0.5	3	100	13 ⁴⁾	35 ⁴⁾	28	TO-92
PN4391	40	50	50	150	4	10	30	15	20	16	TO-92
PN4392	40	50	25	75	2	5	60	15	35	16	TO-92
PN4393	40	50	5	30	0.5	3	100	15	50	16	TO-92
2N4091	40	10	30	-	5	10	30	25	40	16	TO-18
2N4092	40	10	15	-	2	7	50	35	60	16	TO-18
2N4093	40	10	8	-	1	5	80	60	80	16	TO-18
2N4391	40	50	50	150	4	10	30	15	20	14	TO-18
2N4392	40	50	25	75	2	5	60	15	35	14	TO-18
2N4393	40	50	5	30	0.5	3	100	15	50	14	TO-18
2N4856	40	50	50	-	4	10	25	9	25	18	TO-18
2N4857	40	50	20	100	2	6	40	10	50	18	TO-18
2N4858	40	50	8	80	0.8	4	60	20	100	18	TO-18
2N4859	30	50	50	-	4	10	25	9	25	18	TO-18
2N4860	30	50	20	100	2	6	40	10	50	18	TO-18
2N4861	30	50	8	80	0.8	4	60	20	100	18	TO-18
SURFACE-MOUNT TYPES											
BSR56	40	50	50	-	4	10	25	9	25	-	SOT23
BSR57	40	50	20	100	2	6	40	10	50	-	SOT23
BSR58	40	50	8	80	0.8	4	60	20	100	-	SOT23
PMBF4391	40	50	50	150	4	10	30	15	20	14	SOT23
PMBF4392	40	50	25	75	2	5	60	15	35	14	SOT23
PMBF4393	40	50	5	30	0.5	3	100	15	50	14	SOT23
PMBFJ108	25	50	80	-	3	10	8	4 ⁴⁾	6 ⁴⁾	85	SOT23
PMBFJ109	25	50	40	-	2	6	12	4 ⁴⁾	6 ⁴⁾	85	SOT23
PMBFJ110	25	50	10	-	0.5	4	18	4 ⁴⁾	6 ⁴⁾	85	SOT23
PMBFJ111	40	50	20	-	3	10	30	13 ⁴⁾	35 ⁴⁾	28 ⁴⁾	SOT23
PMBFJ112	40	50	5	-	1	5	50	13 ⁴⁾	35 ⁴⁾	28 ⁴⁾	SOT23
PMBFJ113	40	50	2	-	0.5	3	100	13 ⁴⁾	35 ⁴⁾	28 ⁴⁾	SOT23
PZPJ108	25	50	80	-	3	10	8	4 ⁴⁾	6 ⁴⁾	85	SOT223
PZPJ109	25	50	40	-	2	6	12	4 ⁴⁾	6 ⁴⁾	85	SOT223
PZPJ110	25	50	10	-	0.5	4	18	4 ⁴⁾	6 ⁴⁾	85	SOT223

1) at $I_D = 0$; $V_{GS} = 0$ 2) $t_{on} = t_{delay} + t_{rise}$ 3) $t_{off} = t_{delay} + t_{fall}$ 4) typical value