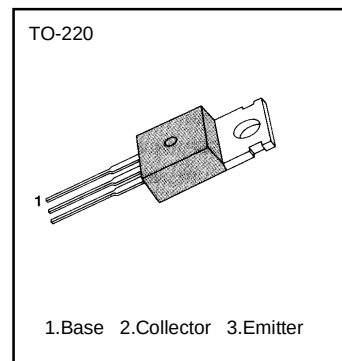


HIGH VOLTAGE POWER SWITCH SWITCHING APPLICATIONS

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CES}	850	V
: BUT11		1000	V
Collector Emitter Voltage	V_{CEO}	400	V
: BUT11A		450	V
Emitter Base Voltage	V_{EBO}	9	V
Collector Current (DC)	I_C	5	A
Collector Current (Pulse)	I_C	10	A
Base Current (DC)	I_B	2	A
Base Current (Pulse)	I_B	4	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	100	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ 150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
*Collector-Emitter Sustaining Voltage : BUT11	$V_{CEO} \text{ (sus)}$	$I_C = 100\text{mA}, I_B = 0$	400			V
: BUT11A			450			V
Collector Cutoff Current : BUT11	I_{CES}	$V_{CE} = 850\text{V}, V_{BE} = 0$			1	mA
: BUT11A		$V_{CE} = 1000\text{V}, V_{BE} = 0$			1	mA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = 9\text{V}, I_C = 0$			10	mA
Collector Emitter Saturation Voltage : BUT11	$V_{CE(sat)}$	$I_C = 3\text{A}, I_B = 0.6\text{A}$			1.5	V
: BUT11A		$I_C = 2.5\text{A}, I_B = 0.5\text{A}$			1.5	V
Base Emitter Saturation Voltage : BUT11	$V_{BE(sat)}$	$I_C = 3\text{A}, I_B = 0.6\text{A}$			1.3	V
: BUT11A		$I_C = 2.5\text{A}, I_B = 0.5\text{A}$			1.3	V
Turn On Time	t_{ON}	$V_{CC} = 250\text{V}, I_C = 2.5\text{A}$			1	μS
Storage Time	t_{STG}	$I_{B1} = I_{B2} = 0.5\text{A}$			4	μS
Fall Time	t_F				0.8	μS

* Pulsed Test: PW = 300 μS , duty cycle = 1.5%

BUT11/11A

NPN SILICON TRANSISTOR

