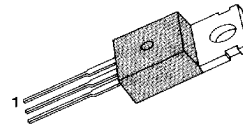


HIGH VOLTAGE SWITCH SWITCHING APPLICATIONS

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage : BUT12	V_{CES}	850	V
: BUT12A		1000	V
Collector Emitter Voltage : BUT12	V_{CEO}	400	V
: BUT12A		450	V
Collector Current (DC)	I_C	8	A
Collector Current (Pulse)	I_C	20	A
Base Current	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 ~ 175	$^\circ\text{C}$

TO-220



1.Base 2.Collector 3.Emitter

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
* Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}$, $L = 25\text{mH}$	400			V
Collector Cutoff Current	I_{CES}	$V_{CE} = V_{CES}$, $V_{BE} = 0$			1	mA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = 9\text{V}$, $I_C = 0$			10	mA
* Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6\text{A}$, $I_B = 1.2\text{A}$			1.5	V
* Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 6\text{A}$, $I_B = 1.2\text{A}$			1.5	V
Turn On Time	t_{ON}	$V_{CC} = 250\text{V}$, $I_C = 6\text{A}$			1	μs
Storage Time	t_{STG}	$I_B1 = -I_B2 = 1.2\text{A}$			4	μs
Fall Time	t_F				0.8	μs

* Pulsed Test: $PW = 300\mu\text{s}$, duty cycle = 1.5%