



BU326S

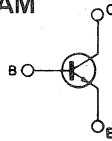
HIGH VOLTAGE POWER SWITCH

The BU 326S is a silicon multi-epitaxial NPN transistor in Jedec TO-3 metal case, particularly intended for switch-mode CTV applications.

ABSOLUTE MAXIMUM RATINGS

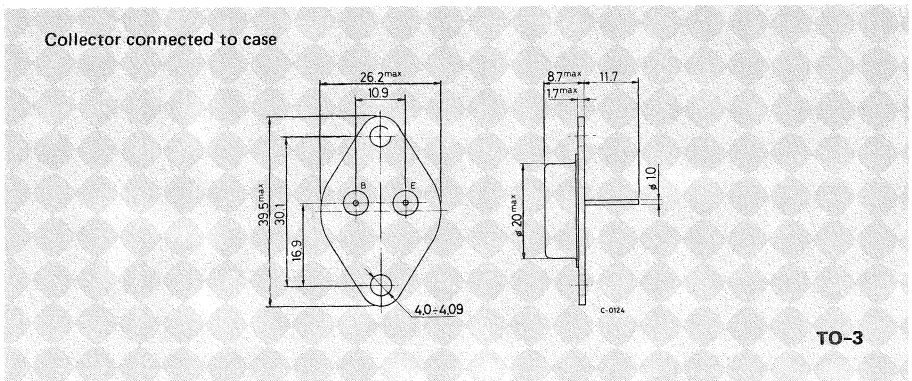
V_{CES}	Collector-emitter voltage ($V_{BE} = 0$)	800	V
V_{CEO}	Collector-emitter voltage ($I_B = 0$)	400	V
V_{EBO}	Emitter-base voltage ($I_C = 0$)	7	V
I_C	Collector current	6	A
I_{CM}	Collector peak current	8	A
I_B	Base current	3	A
P_{tot}	Total power dissipation at $T_{case} \leq 75^\circ\text{C}$	60	W
T_{stg}	Storage temperature	-65 to 175	$^\circ\text{C}$
T_j	Junction temperature	175	$^\circ\text{C}$

INTERNAL SCHEMATIC DIAGRAM



MECHANICAL DATA

Dimensions in mm



**BU326S****THERMAL DATA**

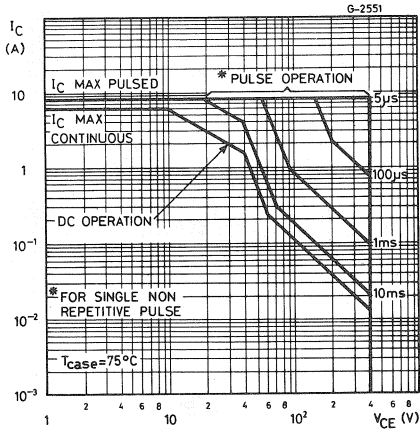
$R_{th\ j-case}$	Thermal resistance junction-case	max	1.67	°C/W
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ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise specified)

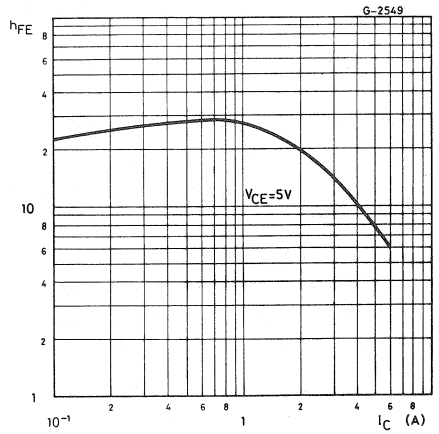
Parameter		Test conditions	Min. Typ. Max.	Unit
I_{CES}	Collector cutoff current ($V_{BE} = 0$)	$V_{CE} = 800\ V$ $V_{CE} = 800\ V$ $T_{case} = 150^{\circ}C$	1 3	mA mA
I_{EBO}	Emitter cutoff current ($I_C = 0$)	$V_{EB} = 7\ V$	1	mA
$V_{CEO(sus)}$ *	Collector-emitter sustaining voltage ($I_B = 0$)	$I_C = 100\ mA$	400	V
$V_{CE(sat)}$ *	Collector-emitter saturation voltage	$I_C = 2.5\ A$ $I_B = 0.5\ A$ $I_C = 4\ A$ $I_B = 1.25\ A$	1.5 3	V V
$V_{BE(sat)}$ *	Base-emitter saturation voltage	$I_C = 2.5\ A$ $I_B = 0.5\ A$ $I_C = 4\ A$ $I_B = 1.25\ A$	1.4 1.8	V V
h_{FE} *	DC current gain	$I_C = 4\ A$ $V_{CE} = 5\ V$	3.5 10	—
f_T	Transition frequency	$I_C = 0.5\ A$ $V_{CE} = 10\ V$	20	MHz
t_{on}	Turn-on time	$I_C = 2.5\ A$ $V_{CC} = 250\ V$ $I_{B1} = 0.5\ A$	0.3	μs
t_s	Storage time	$I_C = 2.5\ A$ $V_{CC} = 250\ V$ $I_{B1} = 0.5\ A$ $I_{B2} = -1\ A$	1.8	μs
t_f	Fall time		0.3	μs

* Pulsed: pulse duration = 300 μs , duty cycle = 1.5%

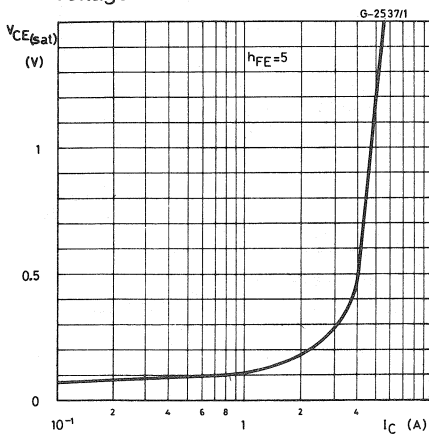
Safe operating areas



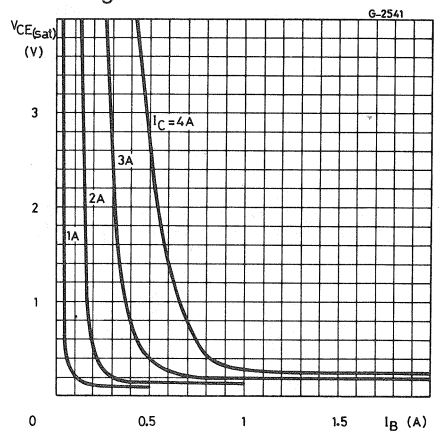
DC current gain



Collector-emitter saturation voltage

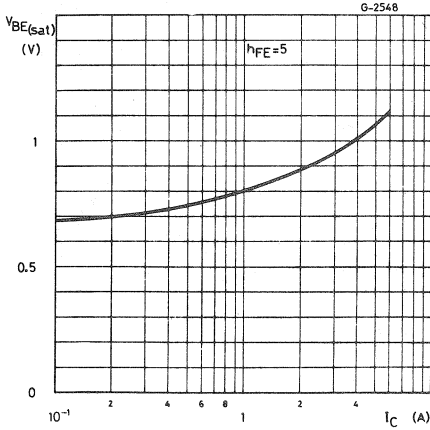


Collector-emitter saturation voltage

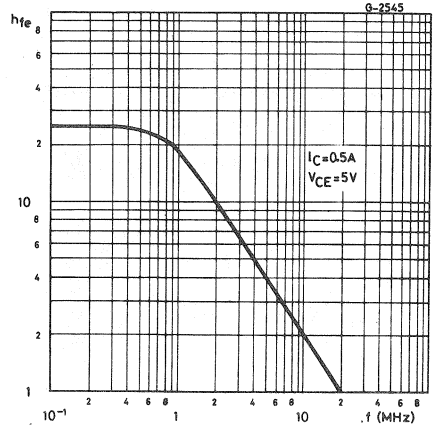




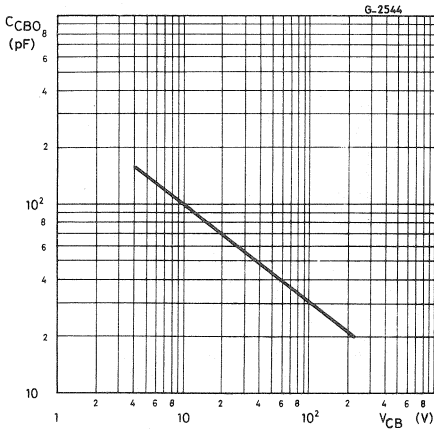
Base-emitter saturation voltage



Small signal current gain



Collector-base capacitance



Saturated switching characteristics

