

THERMAL DATA

$R_{thj-case}$	Thermal Resistance Junction-case	Max	1.46	$^{\circ}\text{C}/\text{W}$
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ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CEO}	Collector Cut-off Current ($I_B = 0$)	$V_{CE} = 160\text{ V}$			1	mA
I_{CEX}	Collector Cut-off Current	$V_{CE} = 250\text{ V}$ $T_{case} = 125^{\circ}\text{C}$ $V_{CE} = 250\text{ V}$			1	mA
		$V_{BE} = -1.5\text{ V}$ $V_{BE} = -1.5\text{ V}$			5	mA
I_{EBO}	Emitter Cut-off Current ($I_C = 0$)	$V_{EB} = 5\text{ V}$			1	mA
$V_{CEO(sus)*}$	Collector-Emitter Sustaining Voltage	$I_C = 200\text{ mA}$	200			V
V_{EBO}	Emitter-Base Voltage ($I_C = 0$)	$I_E = 50\text{ mA}$	7			V
$V_{CE(sat)*}$	Collector-Emitter Saturation Voltage	$I_C = 5\text{ A}$ $I_C = 8\text{ A}$		0.38 0.6	1.2 1.6	V V
		$I_B = 0.5\text{ A}$ $I_B = 1\text{ A}$				
$V_{BE(sat)*}$	Base-Emitter Saturation Voltage	$I_C = 8\text{ A}$		1.35	2	V
h_{FE*}	DC Current Gain	$I_C = 5\text{ A}$ $I_C = 8\text{ A}$	15 8		45	
$I_{S/b}$	Second Breakdown Collector Current	$V_{CE} = 30\text{ V}$ $V_{CE} = 135\text{ V}$	4 0.15			A A
f_T	Transistor Frequency	$V_{CE} = 15\text{ V}$ $f = 10\text{ MHz}$	8			MHz
t_{on}	Turn-on Time	$I_C = 8\text{ A}$ $V_{CC} = 150\text{ V}$		0.28	1	μs
t_s	Storage Time	$I_C = 8\text{ A}$		1.2	1.7	μs
t_f	Fall Time	$I_{B2} = -1\text{ A}$		0.25	0.8	μs
	Clamped $E_{S/b}$ Collector Current	$V_{Clamp} = 200\text{ V}$ $L = 500\text{ }\mu\text{H}$	8			A

* Pulsed: Pulse duration = 300 μs , duty cycle $\leq 2\%$