

Electrical Characteristics: ($T_A = +25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Collector–Emitter Sustaining Voltage	$V_{CE(sus)}$	$I_C = 10\text{mA}$, $I_B = 0$, Note 1	150	–	–	V
Collector Cutoff Current	I_{CEO}	$V_{CE} = 150\text{V}$, $I_B = 0$	–	–	0.1	mA
	I_{CBO}	$V_{CE} = 150\text{V}$, $I_E = 0$	–	–	10	μA
Emitter Cutoff Current	I_{EBO}	$V_{CE} = 150\text{V}$, $I_C = 0$	–	–	10	μA
ON Characteristics (Note 1)						
DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}$, $I_C = 0.1\text{A}$	40	–	–	
		$V_{CE} = 2\text{V}$, $I_C = 2\text{A}$	40	–	–	
		$V_{CE} = 2\text{V}$, $I_C = 0.1\text{A}$	40	–	–	
		$V_{CE} = 2\text{V}$, $I_C = 0.1\text{A}$	20	–	–	
DC Current Gain Linearity	h_{FE}	V_{CE} from 2V to 20V, I_C from 0.1A to 3A	–	2	–	
		NPN to PNP	–	3	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1\text{A}$, $I_B = 0.1\text{A}$	–	–	0.5	V
Base–Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = 2\text{V}$, $I_C = 1\text{A}$	–	–	1	V
Dynamic Characteristics						
Current Gain–Bandwidth Product	f_t	$V_{CE} = 10\text{V}$, $I_C = 500\text{mA}$, $f_{test} = 10\text{MHz}$, Note 2	30	–	–	MHz

Note 1. Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$.

Note 2. $f_T = |h_{fe}| \cdot f_{test}$

