

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
ON Characteristics (Cont'd) (Note 1)						
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 50\text{mA}$, $I_B = 5\text{mA}$	–	–	0.4	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 50\text{mA}$, $I_B = 5\text{mA}$	–	–	0.95	V
Small–Signal Characteristics						
Current Gain–Bandwidth Product 2N4125	f_T	$I_C = 10\text{mA}$, $V_{CE} = 20\text{V}$, $f = 100\text{MHz}$	200	–	–	MHz
2N4126			250	–	–	MHz
Input Capacitance	C_{ibo}	$V_{BE} = 0.5\text{V}$, $I_C = 0$, $f = 100\text{kHz}$	–	–	10	pF
Collector–Base Capacitance	C_{cb}	$I_E = 0$, $V_{CB} = 5\text{V}$, $f = 1\text{MHz}$	–	–	4.5	pF
Small–Signal Current Gain 2N4125	h_{fe}	$I_C = 2\text{mA}$, $V_{CE} = 10\text{V}$, $f = 1\text{kHz}$	50	–	200	
2N4126			120	–	480	
Current Gain – High Frequency 2N4125	$ h_{fe} $	$I_C = 10\text{mA}$, $V_{CE} = 20\text{V}$, $f = 100\text{MHz}$	2.0	–	–	–
2N4126			2.5	–	–	–
Noise Figure 2N4125	NF	$I_C = 100^\circ\text{A}$, $V_{CE} = 5\text{V}$, $R_S = 1\text{k}\Omega$, Noise Bandwidth = 10Hz to 15.7kHz	–	–	5.0	db
2N4126			–	–	4.0	db

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

