



**Characteristics**
**Kennwerte**

		(T <sub>j</sub> = 25°C)	Min.	Typ.	Max.
Collector-Emitter saturation voltage – Kollektor-Sättigungsspannung <sup>1)</sup>					
I <sub>C</sub> = 10 mA, I <sub>B</sub> = 1 mA	V <sub>CEsat</sub>		–	–	0.2 V
I <sub>C</sub> = 50 mA, I <sub>B</sub> = 5 mA			–	–	0.3 V
Base-Emitter saturation voltage – Basis-Sättigungsspannung <sup>1)</sup>					
I <sub>C</sub> = 10 mA, I <sub>B</sub> = 1 mA	V <sub>BEsat</sub>		0.65 V	–	0.85 V
I <sub>C</sub> = 50 mA, I <sub>B</sub> = 5 mA			–	–	0.95 V
Collector-Base cutoff current – Kollektor-Basis-Reststrom					
V <sub>CE</sub> = 30 V, V <sub>EB</sub> = 3 V	I <sub>CBX</sub>		–	–	50 nA
Emitter-Base cutoff current – Emitter-Basis-Reststrom					
V <sub>CE</sub> = 30 V, - V <sub>EB</sub> = 3 V	I <sub>EBV</sub>		–	–	50 nA
Gain-Bandwidth Product – Transitfrequenz					
I <sub>C</sub> = 10 mA, V <sub>CE</sub> = 20 V, f = 100 MHz	f <sub>T</sub>		300 MHz	–	–
Collector-Base Capacitance – Kollektor-Basis-Kapazität					
V <sub>CB</sub> = 5 V, I <sub>E</sub> = i <sub>e</sub> = 0, f = 1 MHz	C <sub>CB0</sub>		–	–	4 pF
Emitter-Base Capacitance – Emitter-Basis-Kapazität					
V <sub>EB</sub> = 0.5 V, I <sub>C</sub> = i <sub>c</sub> = 0, f = 1 MHz	C <sub>EBO</sub>		–	–	8 pf
Switching times – Schaltzeiten (between 10% and 90% levels)					
delay time	V <sub>CC</sub> = 3 V, V <sub>BE</sub> = 0.5 V I <sub>C</sub> = 10 mA, I <sub>B1</sub> = 1 mA	t <sub>d</sub>	–	–	35 ns
rise time		t <sub>r</sub>	–	–	35 ns
storage time	V <sub>CC</sub> = 3 V, I <sub>C</sub> = 10 mA, I <sub>B1</sub> = I <sub>B2</sub> = 1 mA	t <sub>s</sub>	–	–	200 ns
fall time		t <sub>f</sub>	–	–	50 ns
Thermal resistance junction to ambient Wärmewiderstand Sperrschicht – Umgebung		R <sub>thA</sub>	< 357 K/W <sup>2)</sup>		

**Disclaimer:** See data book page 2 or [website](#)  
**Haftungsausschluss:** Siehe Datenbuch Seite 2 oder [Internet](#)

1 Tested with pulses t<sub>p</sub> = 300 μs, duty cycle ≤ 2% – Gemessen mit Impulsen t<sub>p</sub> = 300 μs, Schaltverhältnis ≤ 2%  
 2 Valid, if leads are kept at ambient temperature  
 Gültig, wenn die Anschlüsse auf Umgebungstemperatur gehalten werden