

2N6193 JAN SERIES

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
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ON CHARACTERISTICS ⁽³⁾

DC Current Gain I _C = 0.5 Adc, V _{CE} = 2.0 Vdc I _C = 2.0 Adc, V _{CE} = 2.0 Vdc I _C = 5.0 Adc, V _{CE} = 2.0 Vdc	h _{FE}	60 60 40	240	
Collector-Emitter Saturation Voltage I _C = 2.0 Adc, I _B = 0.2 Adc I _C = 5.0 Adc, I _B = 0.5 Adc	V _{CE(sat)}		0.7 1.2	Vdc
Base-Emitter Saturation Voltage I _C = 2.0 Adc, I _B = 0.2 Adc I _C = 5.0 Adc, I _B = 0.5 Adc	V _{BE(sat)}		1.2 1.8	Vdc

DYNAMIC CHARACTERISTICS

Magnitude of Common Emitter Small-Signal Short Circuit Forward-Current Transfer Ratio I _C = 0.5 Adc, V _{CE} = 10 Vdc, f = 10 MHz	h _{fe}	3.0	15	
Output Capacitance V _{CB} = 10 Vdc, I _E = 0, 100 kHz ≤ f ≤ 1.0 MHz	C _{obo}		300	pF
Output Capacitance V _{BE} = 2.0 Vdc, I _C = 0, 100 kHz ≤ f ≤ 1.0 MHz	C _{ibo}		1250	pF

SWITCHING CHARACTERISTICS

Delay Time	V _{CC} = -40 Vdc, V _{BE(off)} = 3.0 Vdc	t _d		100	ns
Rise Time	I _C = 2.0 Adc, I _{B1} = 0.2 Adc	t _r		100	ns
Storage Time	V _{CC} = -40 Vdc I _C = 2.0 Adc,	t _s		2.0	μs
Fall Time	I _{B1} = -I _{B2} = 0.2 Adc	t _f		200	ns

SAFE OPERATING AREA

DC Tests T _C = +25°C, 1 Cycle, t ≥ 0.5 s Test 1 V _{CE} = 2.0 Vdc, I _C = 5.0 Adc Test 2 V _{CE} = 90 Vdc, I _C = 55 mAdc					
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(3) Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.