

2N5679, 2N5680 JAN SERIES

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS				
Forward Current Transfer Ratio I _C = 250 mAdc, V _{CE} = 2.0 Vdc I _C = 500 mAdc, V _{CE} = 2.0 Vdc I _C = 1.0 Adc, V _{CE} = 2.0 Vdc	h _{FE}	40 20 5	150	
Collector-Emitter Saturation Voltage I _C = 250 mAdc, I _B = 25 mAdc I _C = 500 mAdc, I _B = 50 mAdc	V _{CE(sat)}		0.6 1.0	Vdc
Base-Emitter Saturation Voltage I _C = 250 mAdc, I _B = 25 mAdc I _C = 500 mAdc, I _B = 50 mAdc	V _{BE(sat)}		1.1 1.3	Vdc

DYNAMIC CHARACTERISTICS

Magnitude of Common Emitter Small-Signal Short Circuit Forward-Current Transfer Ratio I _C = 0.1 Adc, V _{CE} = 10 Vdc, f = 10 kHz	h _{fe}	3.0		
Small Signal Short Circuit Forward-Current Transfer Ratio I _C = 0.2 Adc, V _{CE} = 1.5 Vdc, f = 1.0 kHz	h _{fe}	40		
Output Capacitance V _{CB} = 20 Vdc, I _E = 0, f = 1 MHz	C _{obo}		50	pF

SAFE OPERATING AREA

DC Tests

T_C = +25°C, 1 Cycle, t ≥ 0.5 s

Test 1

V_{CE} = 2 Vdc, I_C = 1.0 Adc

Test 2

V_{CE} = 10 Vdc, I_C = 1.0 Adc

Test 3

V_{CE} = 90 Vdc, I_C = 50 mAdc