

2N3715, 2N3716 JAN SERIES

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
Collector-Emitter Cutoff Current V _{CE} = 60 Vdc V _{CE} = 80 Vdc	I _{CES}		1.0 1.0	mAdc

ON CHARACTERISTICS ⁽³⁾

Forward-Current Transfer Ratio I _C = 1.0 Adc, V _{CE} = 2.0 Vdc I _C = 3.0 Adc, V _{CE} = 2.0 Vdc I _C = 5.0 Adc, V _{CE} = 2.0 Vdc I _C = 10 Adc, V _{CE} = 4.0 Vdc	h _{FE}	50 30 10 5.0	150 120	
Collector-Emitter Saturation Voltage I _C = 5.0 Adc, I _B = 0.5 Adc I _C = 10 Adc, I _B = 2.0 Adc	V _{CE(sat)}		1.0 2.5	Vdc
Base-Emitter Saturation Voltage I _C = 5.0 Adc, I _B = 0.5 Adc I _C = 10 Adc, I _B = 2.0 Adc	V _{BE(sat)}		1.5 3.0	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 = 100 kHz – 1.0 MHz	h _{fe}	4.0	20	
Forward Current Transfer Ratio I _C = 0.5 Adc, V _{CE} = 10 Vdc, f = 1.0 kHz	h _{fe}	30	300	
Output Capacitance V _{CB} = 10 Vdc, I _E = 0, f = 1.0 MHz	C _{obo}		500	pF

SAFE OPERATING AREA

DC Tests T _C = +25°C, 1 Cycle, t ≥ 1.0 s Test 1 V _{CE} = 15 Vdc, I _C = 10 Adc Test 2 V _{CE} = 40 Vdc, I _C = 3.75 Adc Test 3 V _{CE} = 55 Vdc, I _C = 0.9 Adc V _{CE} = 65 Vdc, I _C = 0.9 Adc	 2N3715 2N3716
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(3) Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.