ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS (2)				
Forward-Current Transfer Ratio I_C = 1.0 Adc, V_{CE} = 3.0 Vdc I_C = 6.0 Adc, V_{CE} = 3.0 Vdc I_C = 12 Adc, V_{CE} = 3.0 Vdc	h_{FE}	1,000 1,000 150	18,000	
Collector-Emitter Saturation Voltage I_C = 12 Adc, I_B = 120 mAdc I_C = 6.0 Adc, I_B = 24 mAdc	$V_{CE(sat)}$		3.0 2.0	Vdc
Base-Emitter Saturation Voltage I_C = 12 Adc, I_B = 120 mAdc	$V_{BE(sat)}$		4.0	Vdc
Base-Emitter Voltage I_C = 6.0 Adc, V_{CE} = 3.0 Vdc	V_{BE}		2.8	Vdc
DYNAMIC CHARACTERISTICS				
Magnitude of Common Emitter Small-Signal Short-Circuit Forward Current Transfer Ratio I_C = 5.0Adc, V_{CE} = 3.0 Vdc, f = 1.0 MHz	$\lvert h_{fe} \rvert$	10	250	
Small-Signal Short-Circuit Forward Current Transfer Ratio I_C = 5.0 Adc, V_{CE} = 3.0 Vdc, f = 1.0 kHz	h_{fe}	1,000		
Output Capacitance V_{CB} = 10 Vdc, I_E = 0, 100 kHz ≤ f ≤ 1.0 MHz	C_{obo}		300	pF
SWITCHING CHARACTERISTICS				
Turn-On Time V_{CC} = 30 Vdc; I_C = 5.0 Adc; I_B = 20 mAdc	t_{on}		2.0	µs
Turn-Off Time V_{CC} = 30 Vdc; I_C = 5.0 Adc; I_{B1} = I_{B2} = 20 mAdc	t_{off}		10	µs

SAFE OPERATING AREA

DC Tests

T_C = +25^{0}C + 10^{0}C, -0^0, 1 Cycle, t ≥ 1.0 s

Test 1

V_{CE} = 12.5 Vdc, I_C = 12 Adc

Test 2

V_{CE} = 30 Vdc, I_C = 5.0 Adc

Test 3

V_{CE} = 70 Vdc, I_C = 200 mAdc 2N6058

Test 4

V_{CE} = 90 Vdc, I_C = 155 mAdc 2N6059

(2) Pulse Test: Pulse Width = 300µs, Duty Cycle ≤ 2.0%.

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