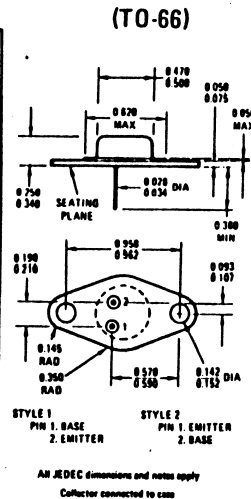


2N3767

MAXIMUM RATINGS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	2N3767	Unit
Collector-Base Voltage	V_{CB}	100	Vdc
Emitter-Base Voltage	V_{EB}	6.0	Vdc
Collector-Emitter Voltage	V_{CEO}	80	Vdc
Collector Current - Continuous	I_C	4.0	Adc
Peak		4.0	
Base Current	I_B	2.0	Adc
Total Device Dissipation @ $T_c = 25^\circ\text{C}$ Derate above 25°C	P_D	20 0.133	Watts W/ $^\circ\text{C}$
Thermal Resistance	θ_{JC}	7.5	$^\circ\text{C}/\text{W}$
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to $^{\circ}175$	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Collector-Emitter Voltage ⁽¹⁾ ($I_C = 100 \text{ mAdc}, I_B = 0$)	BV_{CEO}	80	—	Vdc
Emitter-Base Cutoff Current ($V_{EB} = 6 \text{ Vdc}$)	I_{EBO}	—	0.75	mAdc
Collector Cutoff Current ($V_{CE} = 100 \text{ Vdc}, V_{BE} = 1.5 \text{ Vdc}$) ($V_{CE} = 70 \text{ Vdc}, V_{BE} = 1.5 \text{ Vdc}, T_c = 150^\circ\text{C}$)	I_{CEX}	—	0.1 1.0	mAdc
Collector-Emitter Cutoff Current ($V_{CE} = 80 \text{ Vdc}, I_B = 0$)	I_{CEO}	—	0.7	mAdc
Collector-Base Cutoff Current ($V_{CB} = 100 \text{ Vdc}, I_E = 0$)	I_{CBO}	—	0.1	mAdc

ON CHARACTERISTICS

DC Current Gain ($I_C = 50 \text{ mAdc}, V_{CE} = 5 \text{ Vdc}$) ($I_C = 500 \text{ mAdc}, V_{CE} = 5 \text{ Vdc}$) ($I_C = 1.0 \text{ Adc}, V_{CE} = 10 \text{ Vdc}$)	h_{FE}	30 40 20	— 160 —	—
Collector-Emitter Saturation Voltage ($I_C = 1 \text{ Adc}, I_B = 0.1 \text{ Adc}$) ($I_C = 500 \text{ mAdc}, I_B = 50 \text{ mAdc}$)	$V_{CE(sat)}$	— —	2.5 1.0	Vdc
Base-Emitter Voltage ($I_C = 1.0 \text{ Adc}, V_{CE} = 10 \text{ Vdc}$)	V_{BE}	—	1.5	Vdc

TRANSIENT CHARACTERISTICS

Current-Gain - Bandwidth Product ($I_C = 500 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}, f = 10 \text{ MHz}$)	f_T	10	—	MHz
Common-Base Output Capacitance ($V_{CB} = 10 \text{ Vdc}, I_C = 0 \text{ Adc}, f = 100 \text{ kHz}$)	C_{ob}	—	50	pF
Small-Signal Current Gain ($I_C = 100 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}, f = 1 \text{ kHz}$)	h_{fe}	40	—	—

⁽¹⁾ Pulse Test: Pulse Width $\leq 300 \mu\text{s}$, Duty Cycle $\leq 2.0\%$

