

Type 2N3763
Geometry 6706
Polarity PNP
Qual Level: JAN - JANTXV

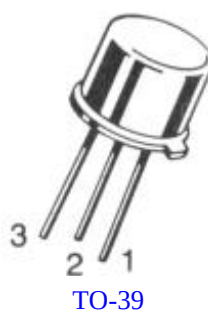
Generic Part Number:
2N3763

REF: MIL-PRF-19500/396

Features:

[Request Quotation](#)

- General-purpose transistor for switching and amplifier applications.
- Housed in a [TO-39](#) case.
- Also available in chip form using the 6706 chip geometry.
- The Min and Max limits shown are per [MIL-PRF-19500/396](#) which Semicoa meets in all cases.



Maximum Ratings

$T_C = 25^{\circ}\text{C}$ unless otherwise specified

Rating	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	60	V
Collector-Base Voltage	V_{CBO}	60	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current, Continuous	I_C	1.5	mA
Operating Junction Temperature	T_J	-55 to +200	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +200	$^{\circ}\text{C}$

Electrical Characteristics

 $T_C = 25^{\circ}\text{C}$ unless otherwise specified

OFF Characteristics	Symbol	Min	Max	Unit
Collector-Base Breakdown Voltage $I_C = 10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	60	---	V
Collector-Emitter Breakdown Voltage $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	60	---	V
Emitter-Base Breakdown Voltage $I_E = 10\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5.0	---	V
Collector-Emitter Cutoff Current $V_{EB} = 2.0\text{ V}$, $V_{CE} = 30\text{ V}$	I_{CEX1}	---	100	nA
Collector-Emitter Cutoff Current $V_{EB} = 2.0\text{ V}$, $V_{CE} = 30\text{ V}$, $T_A = 150^{\circ}\text{C}$	I_{CEX2}	---	150	μA
Collector-Base Cutoff Current $V_{CB} = 30\text{ V}$	I_{CBO}	---	100	nA
Emitter-Base Cutoff Current $V_{EB} = 2.0\text{ V}$	I_{EBO}	---	200	nA

ON Characteristics	Symbol	Min	Max	Unit
Forward current Transfer Ratio $I_C = 10\text{ mA}$, $V_{CE} = 1.0\text{ V}$ $I_C = 150\text{ mA}$, $V_{CE} = 1.0\text{ V}$ (pulse test) $I_C = 500\text{ mA}$, $V_{CE} = 1.0\text{ V}$ (pulse test) $I_C = 1.0\text{ A}$, $V_{CE} = 1.5\text{ V}$ (pulse test) $I_C = 1.5\text{ A}$, $V_{CE} = 5.0\text{ V}$ (pulse test) $I_C = 500\text{ mA}$, $V_{CE} = 1.0\text{ V}$ (pulsed), $T_A = -55^{\circ}\text{C}$	h_{FE1} h_{FE2} h_{FE3} h_{FE4} h_{FE5} h_{FE6}	35 40 40 30 30 20	--- --- 140 120 --- ---	--- --- --- --- --- ---
Collector-Emitter Saturation Voltage $I_C = 10\text{ mA}$, $I_B = 1\text{ mA}$ (pulse test) $I_C = 150\text{ mA}$, $I_B = 15\text{ mA}$ (pulse test) $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$ (pulse test) $I_C = 1.0\text{ A}$, $I_B = 100\text{ mA}$ (pulse test)	$V_{CE(sat)1}$ $V_{CE(sat)2}$ $V_{CE(sat)3}$ $V_{CE(sat)4}$	--- --- --- ---	0.1 0.22 0.50 0.90	V dc V dc V dc V dc
Base-Emitter Saturation Voltage $I_C = 10\text{ mA}$, $I_B = 1\text{ mA}$ $I_C = 150\text{ mA}$, $I_B = 15\text{ mA}$ (pulse test) $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$ (pulse test) $I_C = 1.0\text{ A}$, $I_B = 100\text{ mA}$ (pulse test)	$V_{BE(sat)1}$ $V_{BE(sat)2}$ $V_{BE(sat)3}$ $V_{BE(sat)4}$	--- --- --- ---	0.8 1.0 1.2 1.4	V dc V dc V dc V dc

Small Signal Characteristics	Symbol	Min	Max	Unit
Magnitude of Common Emitter Short Circuit Forward Current Transfer Ratio $I_C = 50\text{ mA}$, $V_{CE} = 10\text{ V}$, $f = 100\text{ MHz}$	$ h_{FE} $	1.5	6.0	---
Open Circuit Output Capacitance $V_{CB} = 10\text{ V}$, $I_E = 0$, $100\text{ kHz} < f < 1\text{ MHz}$	C_{OBO}	---	25	pF
Input Capacitance, Output Open Circuited $V_{EB} = 0.5\text{ V}$, $I_C = 0$, $100\text{ kHz} < f < 1\text{ MHz}$	C_{IBO}	---	80	pF

Switching Characteristics Per Figure 1, MIL-S-19500/396D	Symbol	Min	Max	Unit
Pulse Delay Time	t_d	---	8	ns
Pulse Rise Time	t_r	---	35	ns
Pulse Storage Time	t_s	---	80	ns
Pulse Fall Time	t_f	---	35	ns