

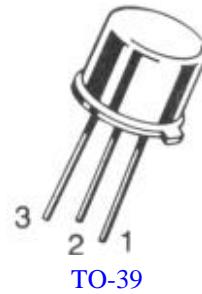
**Type 2N3468  
Geometry 6706  
Polarity PNP  
Qual Level: JAN - JANTXV**

**Generic Part Number:  
2N3468**

**REF: MIL-PRF-19500/348**

**Features:**

- 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-19500/348](#) which Semicoa meets in all cases.



[Request Quotation](#)

**Maximum Ratings**

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

Rating	Symbol	Rating	Unit
Collector-Emitter Voltage	$V_{CEO}$	50	V
Collector-Base Voltage	$V_{CBO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Collector Current, Continuous	$I_C$	1.0	mA
Operating Junction Temperature	$T_J$	-55 to +175	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 to +175	$^\circ\text{C}$

### Electrical Characteristics

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

OFF Characteristics	Symbol	Min	Max	Unit
Collector-Base Breakdown Voltage $I_C = 10 \mu\text{A}$	$V_{(\text{BR})\text{CBO}}$	50	---	V
Collector-Emitter Breakdown Voltage $I_C = 10 \text{ mA}$	$V_{(\text{BR})\text{CEO}}$	50	---	V
Emitter-Base Breakdown Voltage $I_E = 10 \mu\text{A}$ , pulsed	$V_{(\text{BR})\text{EBO}}$	5.0	---	V
Collector-Base Cutoff Current $V_{\text{CB}} = 30 \text{ V}$ $V_{\text{CB}} = 30 \text{ V}, T_A = +150^\circ\text{C}$	$I_{\text{CBO}1}$ $I_{\text{CBO}2}$	---	100 50	nA $\mu\text{A}$
Collector-Emitter Cutoff Current $V_{\text{EB}} = 3.0 \text{ V}, V_{\text{CE}} = 30 \text{ V}$	$I_{\text{CEX}}$	---	100	nA
ON Characteristics	Symbol	Min	Max	Unit
<b>Forward current Transfer Ratio</b>				
$I_C = 150 \text{ mA}, V_{\text{CE}} = 1.0 \text{ V}$ (pulse test)	$h_{\text{FE}1}$	25	---	---
$I_C = 500 \text{ mA}, V_{\text{CE}} = 1.0 \text{ V}$ (pulse test)	$h_{\text{FE}2}$	25	75	---
$I_C = 1.0 \text{ A}, V_{\text{CE}} = 5 \text{ V}$ (pulse test)	$h_{\text{FE}3}$	25	---	---
$I_C = 150 \text{ mA}, V_{\text{CE}} = 1.0 \text{ V}$ (pulse test), $T = -55^\circ\text{C}$	$h_{\text{FE}4}$	10	---	---
<b>Collector-Emitter Saturation Voltage</b>				
$I_C = 150 \text{ mA}, I_B = 15 \text{ mA}$ (pulse test)	$V_{\text{CE}(\text{sat})1}$	---	0.35	V dc
$I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$ (pulse test)	$V_{\text{CE}(\text{sat})2}$	---	0.6	V dc
$I_C = 1.0 \text{ A}, I_B = 100 \text{ mA}$ (pulse test)	$V_{\text{CE}(\text{sat})3}$	---	1.2	V dc
<b>Base-Emitter Saturation Voltage</b>				
$I_C = 150 \text{ mA}, I_B = 15 \text{ mA}$ (pulse test)	$V_{\text{BE}(\text{sat})1}$	---	1.0	V dc
$I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$ (pulse test)	$V_{\text{BE}(\text{sat})2}$	0.8	1.2	V dc
$I_C = 1.0 \text{ A}, I_B = 100 \text{ mA}$ (pulse test)	$V_{\text{BE}(\text{sat})3}$	---	1.6	V dc
Small Signal Characteristics	Symbol	Min	Max	Unit
<b>Extrapolated Unity Gain Frequency</b> $V_{\text{CE}} = 10 \text{ V}, I_C = 50 \text{ mA}, f = 100 \text{ MHz}$	$f_t$	150	500	MHz
<b>Open Circuit Output Capacitance</b> $V_{\text{CB}} = 10 \text{ V}, I_E = 0, 100 \text{ kHz} < f < 1 \text{ MHz}$	$C_{\text{OBO}}$	---	25	pF
<b>Input Capacitance, Output Open Circuited</b> $V_{\text{EB}} = 0.5 \text{ V}, I_C = 0, 100 \text{ kHz} < f < 1 \text{ MHz}$	$C_{\text{IBO}}$	---	100	pF
Switching Characteristics	Symbol	Min	Max	Unit
<b>Delay Time</b> $I_C = 500 \text{ mA}, I_{B1} = 50 \text{ mA}, V_{\text{EB}} = 2 \text{ V}$	$t_d$	---	10	ns
<b>Rise Time</b> $I_C = 500 \text{ mA}, I_{B1} = 50 \text{ mA}, V_{\text{EB}} = 2 \text{ V}$	$t_r$	---	30	ns
<b>Storage Time</b> $I_C = 500 \text{ mA}, I_{B1} = I_{B2} = 50 \text{ mA}$	$t_s$	---	60	ns
<b>Fall Time</b> $I_C = 500 \text{ mA}, I_{B1} = I_{B2} = 50 \text{ mA}$	$t_f$	---	30	ns