

PNP SILICON TRANSISTOR

JEDEC TO-39 CASE

2N3467, 2N3468 types are Silicon PNP Switching Transistors designed

for core driver applications

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	<u>SYMBOL</u>	<u>2N3467</u>	<u>2N3468</u>	<u>UNIT</u>
Collector-Base Voltage	V_{CB0}	40	50	V
Collector-Emitter Voltage	V_{CEO}	40	50	V
Emitter-Base Voltage	V_{EBO}		5.0	V
Collector Current	I_C		1.0	A
Power Dissipation	P_D		1.0	W
Power Dissipation ($T_C=25^\circ\text{C}$)	P_D		5.0	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		$^\circ\text{C}$
Thermal Resistance	θ_{JA}	175		$^\circ\text{C/W}$
Thermal Resistance	θ_{JC}	35		$^\circ\text{C/W}$

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

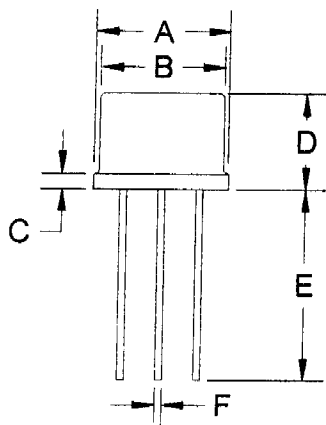
<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>2N3467</u>		<u>2N3468</u>		<u>UNIT</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
I_{CBO}	$V_{CB}=30\text{V}$		0.1		0.1	μA
I_{CBO}	$V_{CB}=30\text{V}, T_A=100^\circ\text{C}$		15		15	μA
I_{CEV}	$V_{CE}=30\text{V}, V_{BE}=3.0\text{V}$		100		100	nA
I_{BEV}	$V_{CE}=30\text{V}, V_{BE}=3.0\text{V}$		120		120	nA
BV_{CBO}	$I_C=10\mu\text{A}$	40		50		V
BV_{CEO}	$I_C=10\text{mA}$	40		50		V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0		5.0		V
$V_{CE(SAT)}$	$I_C=150\text{mA}, I_B=15\text{mA}$		0.3		0.36	V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.5		0.6	V
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		1.0		1.2	V
$V_{BE(SAT)}$	$I_C=150\text{mA}, I_B=15\text{mA}$		1.0		1.0	V
$V_{BE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$	0.8	1.2	0.8	1.2	V
$V_{BE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		1.6		1.6	V



ELECTRICAL CHARACTERISTICS (Continued)

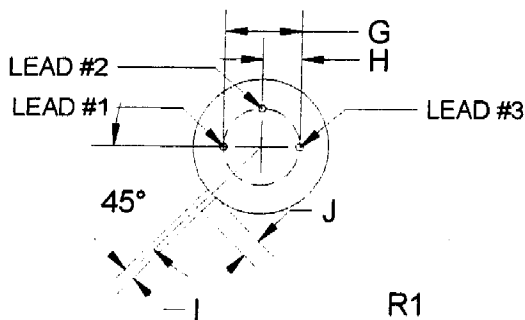
SYMBOL	TEST CONDITIONS	2N3467		2N3468		UNITS
		MIN	MAX	MIN	MAX	
h_{FE}	$V_{CE}=1.0V, I_C=150mA$	40		25		
h_{FE}	$V_{CE}=1.0V, I_C=500mA$	40	120	25	75	
h_{FE}	$V_{CE}=5.0V, I_C=1.0A$	40		20		
f_T	$V_{CE}=10V, I_C=50mA, f=100MHz$	175		150		MHz
C_{ob}	$V_{CB}=10V, I_E=0, f=100kHz$		25		25	pF
C_{ib}	$V_{EB}=0.5V, I_C=0, f=100kHz$		100		100	pF
t_{ON}	$V_{CC}=30V, V_{BE}=2.0V, I_C=500mA, I_{B1}=50mA$		40		40	ns
t_{OFF}	$V_{CC}=30V, I_C=500mA, I_{B1}=I_{B2}=50mA$		90		90	ns
QT	$V_{CC}=30V, I_C=500mA, I_B=50mA$		6.0		6.0	nC

TO-39 CASE - MECHANICAL DIMENSIONS



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.335	0.370	8.51	9.40
B (DIA)	0.315	0.335	8.00	8.51
C	-	0.040	-	1.02
D	0.240	0.260	6.10	6.60
E	0.500	-	12.70	-
F (DIA)	0.016	0.021	0.41	0.53
G (DIA)	0.200		5.08	
H	0.100		2.54	
I	0.028	0.034	0.71	0.86
J	0.029	0.045	0.74	1.14

TO-39 (REV: R1)



Lead Code:

- 1) Emitter
- 2) Base
- 3) Collector