

SILICON NPN POWER TRANSISTORS





<u>Cen</u>t Ò Semiconductor Corp.

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DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3054, 2N3054A devices are silicon NPN power transistors manufactured by the epitaxial base process, mounted in a hermetically sealed metal case, designed for general purpose amplifier and switching applications.

MARKING: FULL PART NUMBER

		J		
MAXIMUM RATINGS: (T _C =25°C) Collector-Base Voltage		SYMBOL V _{CBO}	90	UNITS V
	8	VCEV	90	V
C C		VCEV VCER	60	v
0		VCER VCEO	55	v
0		VEBO	7.0	v
	0	IC AEBO	4.0	Â
			2.0	A
		I _B	25	Ŵ
Collector-Emitter Voltage Collector-Emitter Voltage Collector-Emitter Voltage Emitter-Base Voltage Continuous Collector Current Continuous Base Current Power Dissipation (2N3054) Power Dissipation (2N3054A) Operating and Storage Junction Temperature Thermal Resistance (2N3054A) Operating and Storage Junction Temperature Thermal Resistance (2N3054A) ELECTRICAL CHARACTERISTICS: ($T_C=25^{\circ}C$ units SYMBOL TEST CONDITIONS ICEV VCE=90V, VEB=1.5V ICEV VCE=90V, VEB=1.5V, T_C=150^{\circ}C ICEO VCE=30V IEBO VEB=7.0V BVCEO IC=100mA BVCER IC=100mA, RBE=100Ω VCE(SAT) IC=500mA, IB=50mA VCE(SAT) IC=3.0A, IB=1.0A VBE(ON) VCE=4.0V, IC=500mA		PD		
		P _D	75	W
Thermal Resistance (2N3054)		T _J , T _{stg} [⊙] JC	-65 to +200	°C
			7.0	°C/W
Thermal Re	Thermal Resistance (2N3054A)		2.33	°C/W
ELECTRIC	AL CHARACTERISTICS: (T _C =25°C	unless otherwise no	oted)	
	TEST CONDITIONS	MIN	MAX	UNITS
ICEV			1.0	mA
ICEV	V _{CE} =90V, V _{EB} =1.5V, T _C =150°C		6.0	mA
ICEO	V _{CE} =30V		500	μA
I _{EBO}	V _{EB} =7.0V		1.0	mA
BVCEO	I _C =100mA	55		V
BVCER	I _C =100mA, R _{BE} =100Ω	60		V
V _{CE} (SAT)	I _C =500mA, I _B =50mA		1.0	V
			6.0	V
			1.7	V
h _{FE}	V _{CE} =4.0V, I _C =500mA	25	150	
hFF	V _C =4.0V, I _C =3.0A	5.0		
h _{fe}	V _{CF} =4.0V, I _C =100mA, f=1.0kHz	25	180	
fT	V _{CF} =10V, I _C =200mA, f=1.0MHz	3.0		MHz
fhfe	V _{CF} =4.0V, I _C =100mA	30		kHz
inte		00		

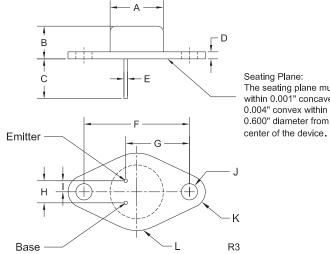
R2 (2-September 2014)



2N3054 2N3054A

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TO-66 CASE - MECHANICAL OUTLINE



Seating Plane: The seating plane must be within 0.001" concave to 0.004" convex within 0.600" diameter from the

MARKING: FULL PART NUMBER

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
A (DIA)	0.470	0.500	11.94	12.70			
В	0.250	0.340	6.35	8.64			
С	0.360	-	9.14	-			
D	0.050	0.075	1.27	1.91			
E (DIA)	0.028	0.034	0.71	0.86			
F	0.956	0.964	24.28	24.48			
G	0.570	0.590	14.48	14.99			
Н	0.190	0.210	4.83	5.33			
I	0.093	0.107	2.36	2.72			
J (DIA)	0.142	0.152	3.61	3.86			
K (RAD)	0.141		3.58				
L (RAD)	0.345		8.76				
TO-66 (REV:R3)							

R2 (2-September 2014)

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CONTACT US

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