2N3439
2N3440

SILICON
NPN TRANSISTOR



TO-39 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3439 and 2N3440 are silicon NPN transistors designed for consumer and industrial line-operated applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**	**2N3439**	**2N3440**	**UNITS**
Collector-Base Voltage	V_{CBO}	450	300	V
Collector-Emitter Voltage	V_{CEO}	350	250	V
Emitter-Base Voltage	V_{EBO}	7.0		V
Continuous Collector Current	I_C	1.0		A
Continuous Base Current	I_B	0.5		A
Power Dissipation	P_D	1.0		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

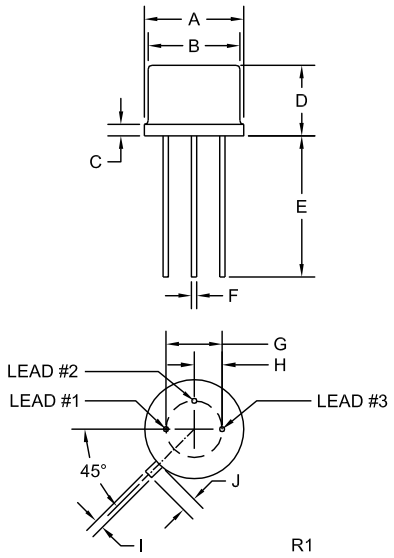
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=360V (2N3439)		20	μA
I_{CBO}	V_{CB}=250V (2N3440)		20	μA
I_{CEX}	V_{CE}=450V, V_{BE}=1.5V (2N3439)		500	μA
I_{CEX}	V_{CE}=300V, V_{BE}=1.5V (2N3440)		500	μA
I_{CEO}	V_{CE}=300V (2N3439)		20	μA
I_{CEO}	V_{CE}=200V (2N3440)		50	μA
I_{EBO}	V_{EB}=6.0V		20	μA
BV_{CEO}	I_C=50mA (2N3439)	350		V
BV_{CEO}	I_C=50mA (2N3440)	250		V
$V_{CE(SAT)}$	I_C=50mA, I_B=4.0mA		0.5	V
$V_{BE(SAT)}$	I_C=50mA, I_B=4.0mA		1.3	V
h_{FE}	V_{CE}=10V, I_C=2.0mA (2N3439)	30		
h_{FE}	V_{CE}=10V, I_C=20mA	40	160	
f_T	V_{CE}=10V, I_C=10mA, f=5.0MHz	15		MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		10	pF
C_{ib}	V_{EB}=5.0V, I_C=0, f=1.0MHz		75	pF

R2 (25-November 2019)

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TO-39 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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

MARKING: FULL PART NUMBER

R2 (25-November 2019)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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