

2N2646
2N2647

**SILICON
PN UNIJUNCTION TRANSISTORS**



TO-18 (UJT) CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N2646 and 2N2647 devices are silicon PN Unijunction Transistors designed for general purpose industrial applications.

MARKING: FULL PART NUMBER

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

Emitter Reverse Voltage	V_{B2E}	30	V
Interbase Voltage	V_{B2B1}	35	V
RMS Emitter Current	I_e	50	mA
Peak Emitter Current (Duty Cycle $\leq 1\%$, PRR ≤ 10 pps)	i_e	2.0	A
RMS Power Dissipation	P_D	300	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

SYMBOL

V_{B2E}	30	
V_{B2B1}	35	
I_e	50	mA
i_e	2.0	A
P_D	300	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

UNITS

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

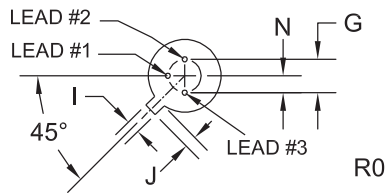
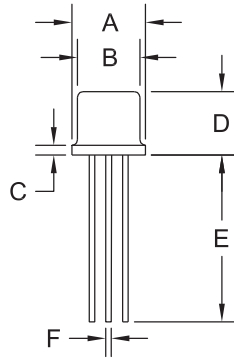
SYMBOL	TEST CONDITIONS	2N2646		2N2647		UNITS
		MIN	MAX	MIN	MAX	
η	$V_{B2B1}=10\text{V}$	0.56	0.75	0.68	0.82	
R_{BB}	$V_{B2B1}=3.0\text{V}$	4.7	9.1	4.7	9.1	k Ω
I_{EB2O}	$V_{B2E}=30\text{V}$	-	12	-	0.2	μA
I_V	$V_{B2B1}=20\text{V}, R_{B2}=100\Omega$	4.0	-	8.0	18	mA
I_P	$V_{B2B1}=25\text{V}$	-	5.0	-	2.0	μA
V_{OB1}	$V_1=20\text{V}$	3.0	-	6.0	-	V

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TO-18 (UJT) CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING: FULL PART NUMBER

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.209	0.230	5.31	5.84
B (DIA)	0.178	0.195	4.52	4.95
C	-	0.030	-	0.76
D	0.170	0.210	4.32	5.33
E	0.500	-	12.70	-
F (DIA)	0.016	0.019	0.41	0.48
G (DIA)	0.100		2.54	
H	0.050		1.27	
I	0.036	0.046	0.91	1.17
J	0.028	0.048	0.71	1.22

TO-18 (UJT) (REV: R0)

R1 (2-December 2013)

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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