

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N2646  
2N2647

SILICON UNIJUNCTION TRANSISTOR

JEDEC TO-18 CASE\*

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N2646, 2N2647 types are silicon PN unijunction transistors designed for general purpose industrial applications.

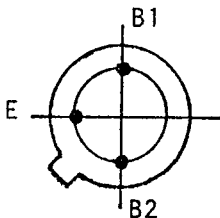
MAXIMUM RATINGS (TA=25°C unless otherwise noted)

	SYMBOL		UNIT
RMS Power Dissipation	P <sub>D</sub> (RMS)	300	mW
RMS Emitter Current	I <sub>E</sub> (RMS)	50	mA
Peak Pulse Emitter Current	i <sub>E</sub>	2.0	A
Interbase Voltage	V <sub>B2B1</sub>	35	V
Emitter Reverse Voltage	V <sub>B2E</sub>	30	V
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 TO +150	°C

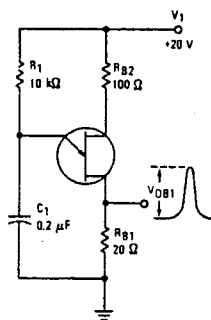
ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N2646		2N2647		UNIT
		MIN	MAX	MIN	MAX	
η	V <sub>B2B1</sub> =10V†	0.56	0.75	0.68	0.82	-
R <sub>BBO</sub>	V <sub>B2B1</sub> =3.0V, I <sub>E</sub> =0	4.7	9.1	4.7	9.1	kΩ
I <sub>B2</sub> (MOD)	V <sub>B2B1</sub> =10V, I <sub>E</sub> =50mA	15 TYP		15 TYP		mA
α <sub>R<sub>BBO</sub></sub>	V <sub>B2B1</sub> =3.0V, T <sub>A</sub> =-65°C to +150°C	0.1	0.9	0.1	0.9	%/°C
V <sub>EB1</sub> (SAT)	V <sub>B2B1</sub> =10V, I <sub>E</sub> =50mA	3.5 TYP		3.5 TYP		V
I <sub>EO</sub>	V <sub>B2E</sub> =30V, I <sub>B1</sub> =0		12		0.2	μA
I <sub>P</sub>	V <sub>B2B1</sub> =25V		5.0		2.0	μA
I <sub>V</sub>	V <sub>B2B1</sub> =20V, R <sub>B2</sub> =100Ω	4.0	-	8.0	18	mA
V <sub>OB1</sub>	See test circuit below	3.0		6.0		V

\*Conforms to JEDEC TO-18 outline except for lead configuration.



V<sub>OB1</sub> TEST CIRCUIT



†η TEST CIRCUIT

