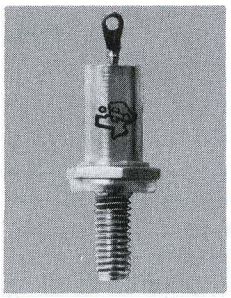
TYPES 1N1130 AND 1N1131
SINGLE JUNCTION SILICON RECTIFIERS

TYPES 1N1130 AND 1N1131
BULLETIN NO. DL-S 907 MAY, 1958
REPLACES BULLETIN NO. DL-S 724

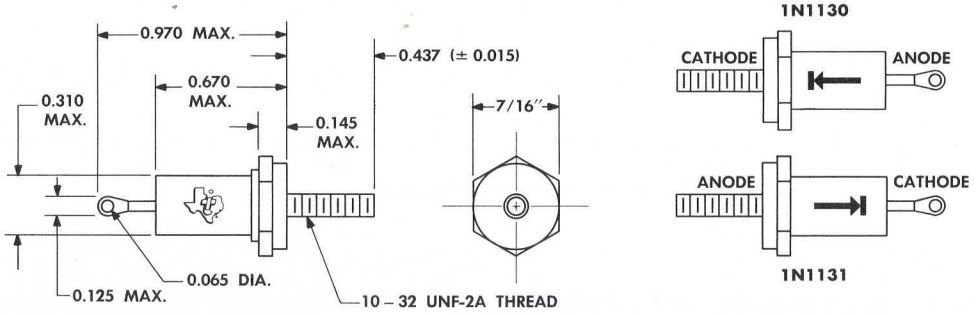


1500 VOLTS • 300 mA

Designed to meet stringent military requirements
Ideal for miniaturization
Available with anode to stud or cathode to stud

mechanical data

Welded case with glass-to-metal seal between case and lead. Approximate weight is 5.9 grams.



absolute maximum ratings

epx	Recurrent Peak Inverse Voltage at + 25°C*	1500 V
I_o	Average Rectified Forward Current at + 25°C*†	300 mA
i_l	Recurrent Peak Current at – 65°C to + 150°C†	1 A
	Stud Temperature	165 °C
	Altitude*	70,000 ft
T_A	Operating Temperature, Ambient	– 65°C to + 150°C

electrical specifications

D.C. Test at 25°C

LI_b	Maximum Reverse Leakage Current at $E_b = -1500$ Vdc	50 μA
E_b	Maximum Forward Voltage Drop at $I_o = 300$ mA	15 V

*Refer to characteristic curves.
†Mounted on a 2.5" x 2.5" x $\frac{1}{16}$" aluminum heat sink.

SEMICONDUCTOR-COMPONENTS DIVISION

TEXAS INSTRUMENTS
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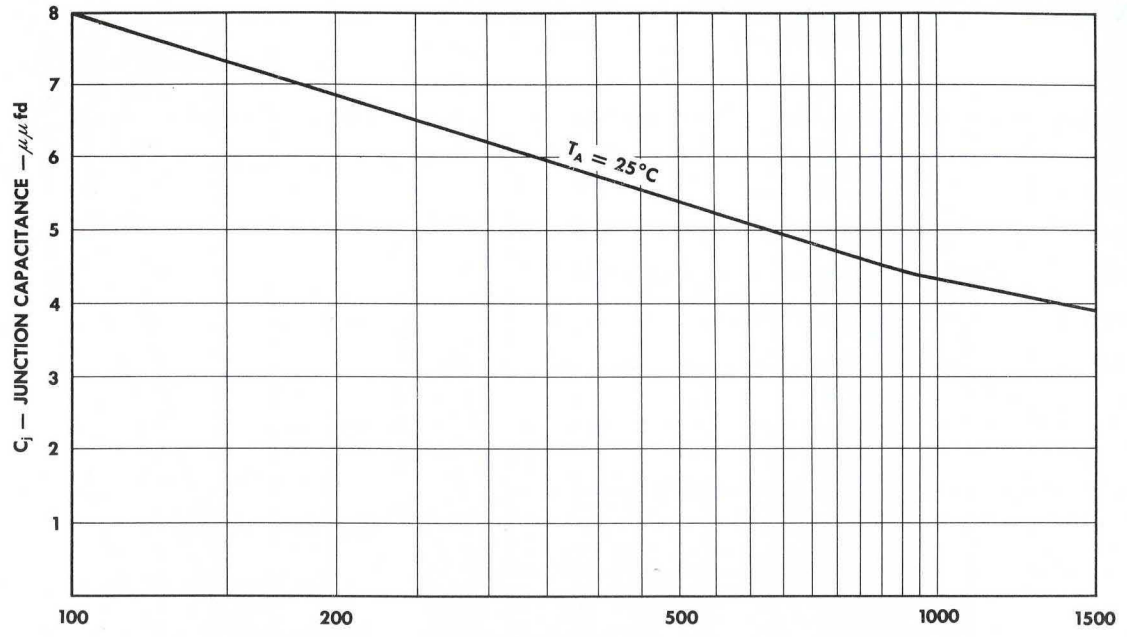
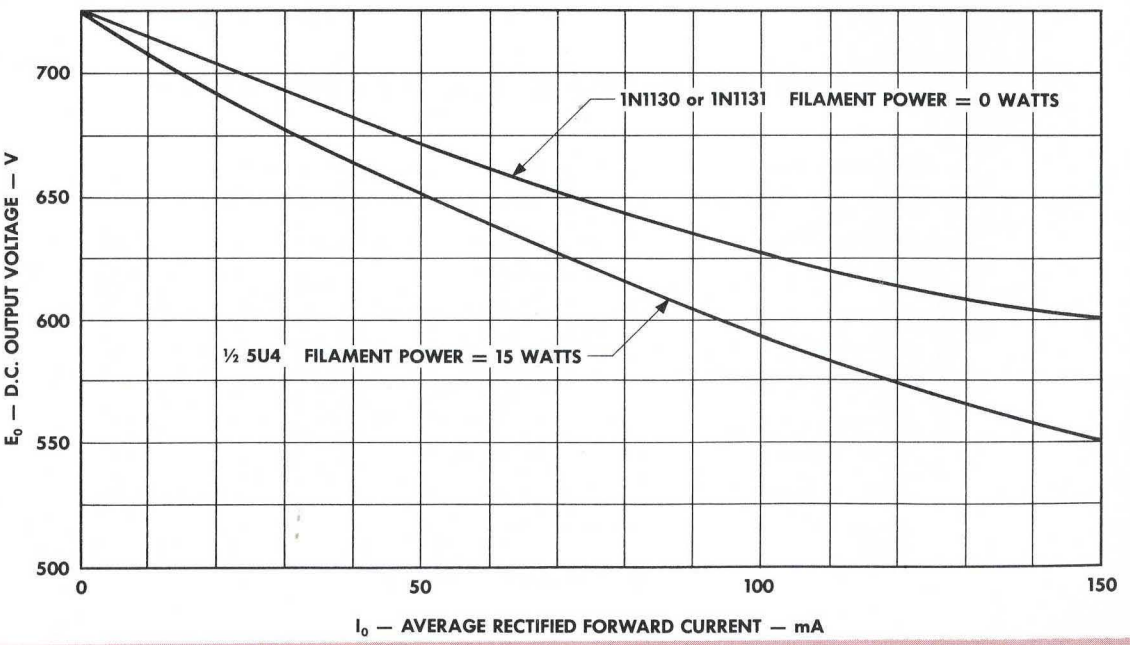
TYPICAL D.C. JUNCTION CAPACITANCE CHARACTERISTICS



TYPICAL EFFICIENCY COMPARISON WITH HALF OF A 5U4 VACUUM TUBE

(HALF-WAVE CIRCUIT WITH CAPACITIVE INPUT AT 1500 VOLTS PIV AT 25°C)



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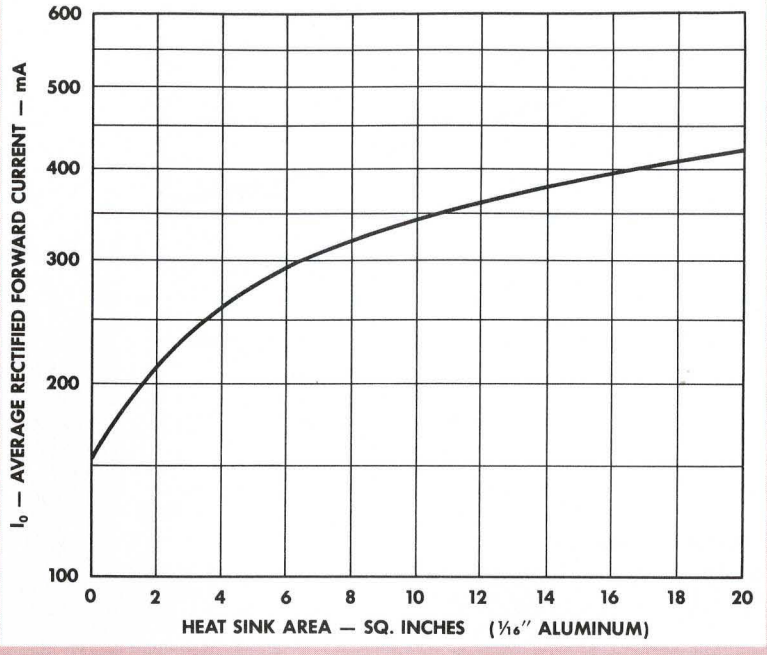
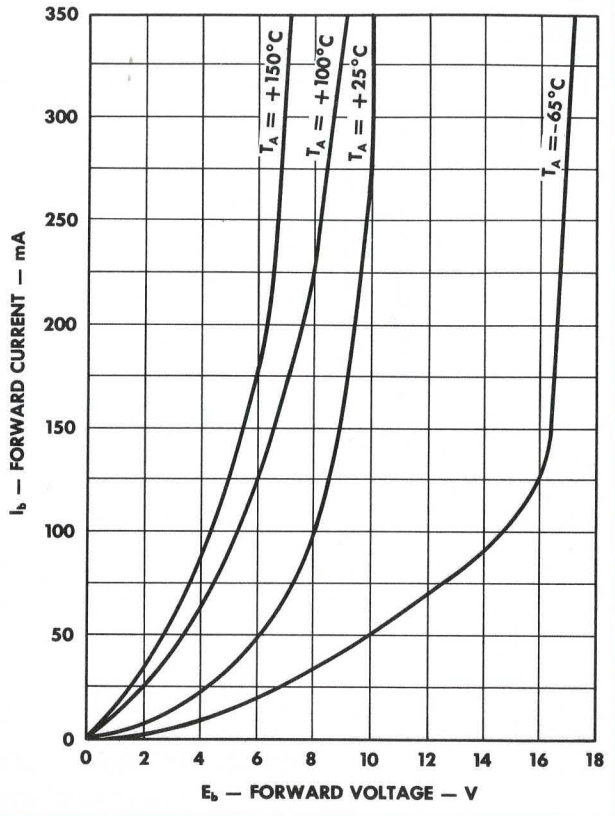
AVERAGE RECTIFIED CURRENT VERSUS HEAT SINK AREA

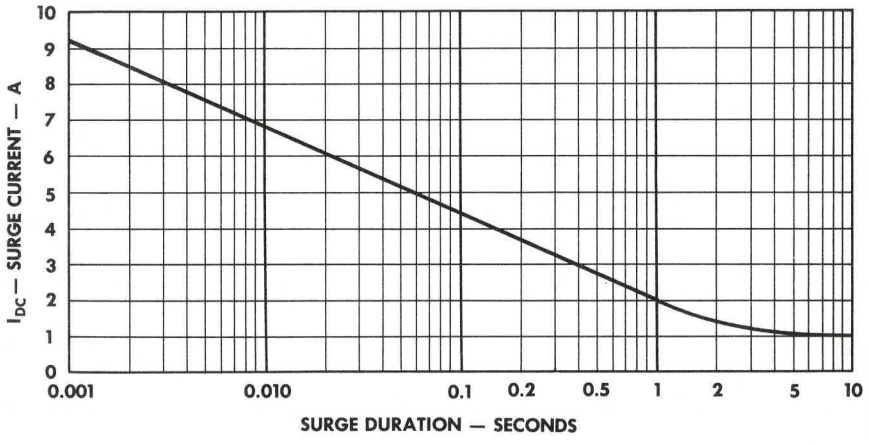
(STILL AIR: T_A = 25°C)



TYPICAL STATIC FORWARD CHARACTERISTICS

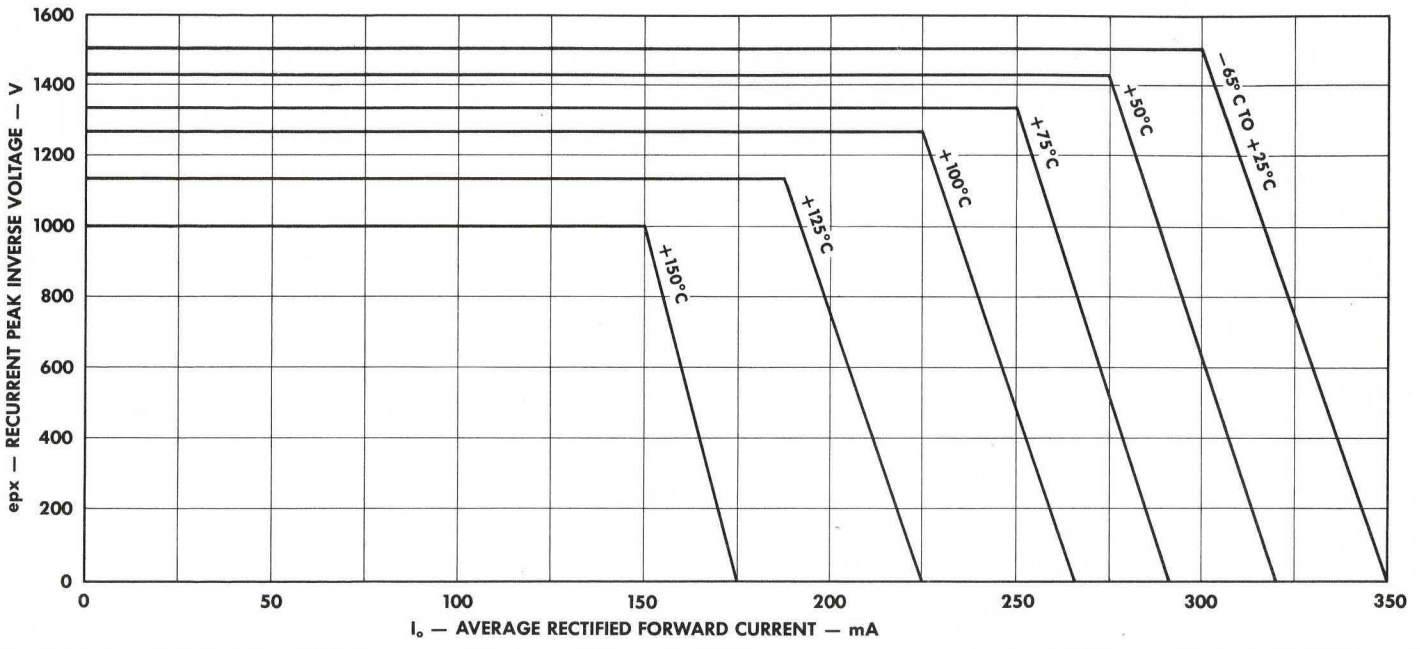


NON-REPETITIVE SURGE CURRENT RATINGS AT 25°C

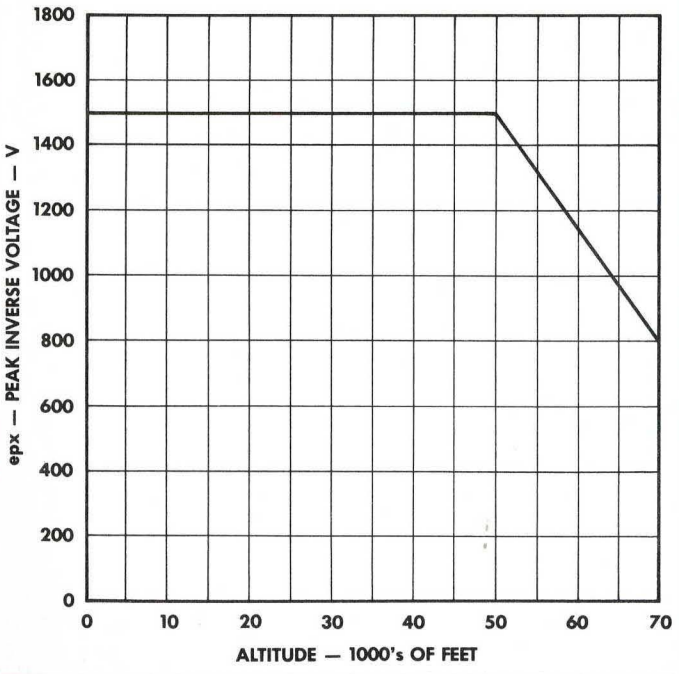


OPERATING VOLTAGE AND CURRENT RATINGS WITH TEMPERATURE

(MOUNTED ON A 2.5″ x 2.5″ x 1/16″ ALUMINUM HEAT SINK)



PEAK INVERSE VOLTAGE RATING WITH ALTITUDE



TYPICAL STATIC REVERSE CHARACTERISTICS