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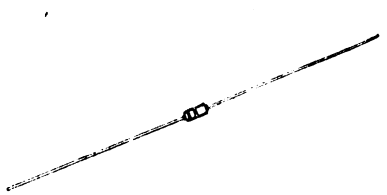
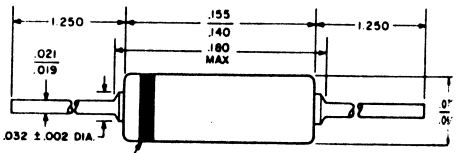
IN4727

The General Electric type 1N4727 is a very high speed silicon planar epitaxial passivated diode for computer circuits, switching circuits and general purpose applications. It features maximum limits on junction capacitance and stored charge to ensure reproducible performance in high speed switching circuits.
The A291 is a power silicon rectifier diode for use in applications requiring blocking voltages up to 2000 volts and forward current ratings up to 250 amperes average in single phase applications. This device was formerly known as 6RW51, and is reverse polarity device. The stud is the anode.



absolute maximum ratings: (25°C) (unless otherwise specified)

	1N4727	
Voltage		
Reverse (continuous operating)	20	volts
Current		
Average Rectified	75	mA
Forward Steady-State DC	115	mA
Recurrent Peak Forward	225	mA
Peak Forward Surge (1 μsec. @ 1% Duty Cycle)	2000	mA
Power		
(with Heatsinking .250" from end of diode body)		
Dissipation (Note 1)	500	mW
Dissipation (125°C) (Note 2)	200	mW
Temperature		
Operating	← −65 to +175 →	°C
Storage	← −65 to +200 →	°C
Lead ($\frac{1}{16} \pm \frac{1}{32}$ inch from case for 10 sec.)	← 300 →	°C
Derate		
Note 1: For ambient temperature above 25°C	3.0	mW/°C
Note 2: For ambient temperature above 125°C	4.0	mW/°C



1N4727, DHD

electrical characteristics: (25°C) (unless otherwise specified)

		1N4727			
		Min.	Typ.	Max.	
Breakdown Voltage ($I_R = 5\ \mu A$)	B_V	30			Volts
Forward Voltage ($I_F = 10$ mA)	V_F		0.79	0.85	Volts
Reverse Current ($V_R = 20V$)	I_R		.02	0.1	μamp
($V_R = 20V$, $T_A = 100°C$)	I_R		3	10	μamp
Stored Charge (Note 5) ($I_F = 10$ mA) (Note 3)	Q_S		24	40	pCoul
Capacitance ($V_R = 0V$) (Note 4)	C_o		1.5	4	pf

Note 3: Stored charge as measured on B-Line Electronics model QS-3 Stored Charge Meter (pulse amplitude = 5 volts, pulse width = 50 ns, rise time = 0.4 ns, source impedance = 10 ohms)

Note 4: Capacitance as measured on Boonton Electronics model 75A Capacitance Bridge at a signal level of 50 mv rms and a frequency of 1 mc.