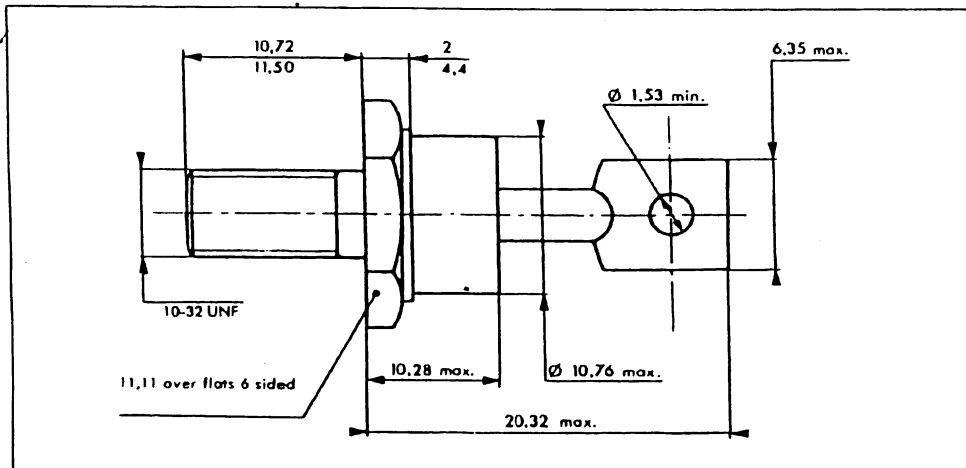


25 Amp Schottky Rectifiers 1N5829 – 1N5831



D0203AA (D04)

Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N5829	20V	20V
1N5830	30V	30V
1N5831	40V	40V

- Schottky Barrier Rectifier
- Low forward voltage drop
- 25 Amperes
- 125°C Junction Temperature
- VRRM 20 to 40 volts

Electrical Characteristics

		1N5829	1N5830	1N5831	
Average forward current	I _{F(AV)}	25A	25A	25A	T _C = 97°C, square wave, R _{θJC} = 1.75°C/W 8.3ms, half sine, T _J = 125°C
Maximum surge current	I _{FSM}	800A	800A	800A	
Max peak forward voltage	V _{FM}	.360V	.370V	.380V	
Max peak forward voltage	V _{FM}	.440V	.460V	.480V	
Max peak forward voltage	V _{FM}	.720V	.770V	.820V	I _{FM} = 10A: T _J = 25°C*
Max peak reverse current	I _{RM}	150mA	150mA	150mA	I _{FM} = 25A: T _J = 25°C*
Max peak reverse current	I _{RM}	3.0mA	3.0mA	3.0mA	I _{FM} = 78.5A: T _J = 25°C*
Typical junction capacitance	C _J	1650pF	1650pF	1650pF	V _{RRM, T_J} = 100°C
					V _{RRM, T_J} = 25°C
					T _J = 25°C, V _R = 5V, f = 1MHz

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T _{STG}	-65°C to 125°C
Operating junction temp range	T _J	-65°C to 125°C
Maximum thermal resistance	R _{θJC}	1.75°C/W junction to case
Typical thermal resistance	R _{θJS}	0.5°C/W junction to sink
Mounting torque		15 inch pounds maximum
Weight		6 grams (.02 ounces) typical



SOLID STATE INC.

46 FARRAND STREET
BLOOMFIELD, NEW JERSEY 07003

www.solidstateinc.com

1N5829-1N5831

Figure 1
Typical Forward Characteristics

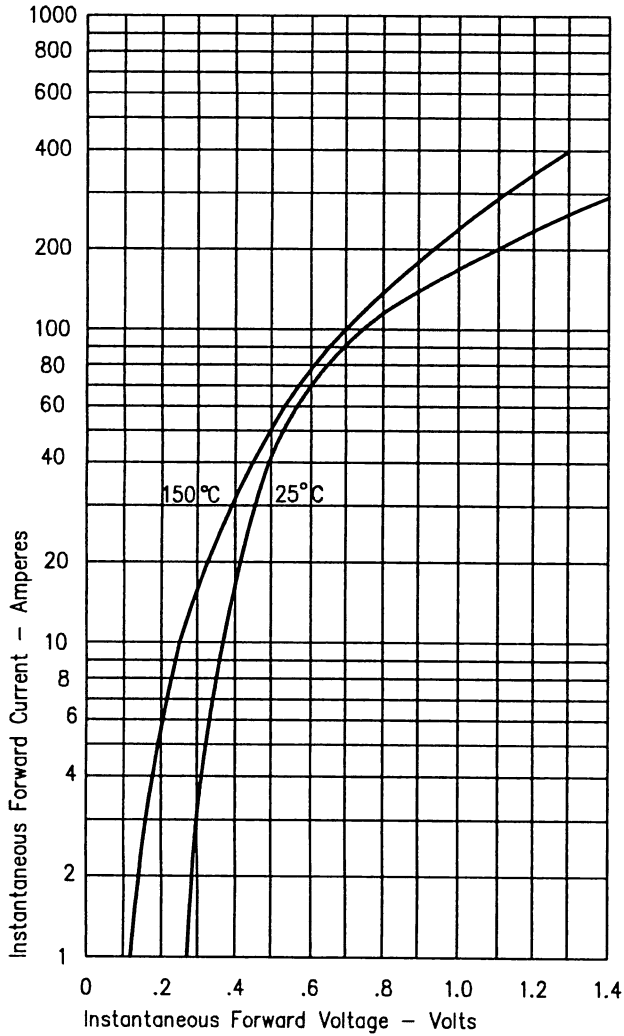


Figure 3
Typical Junction Capacitance

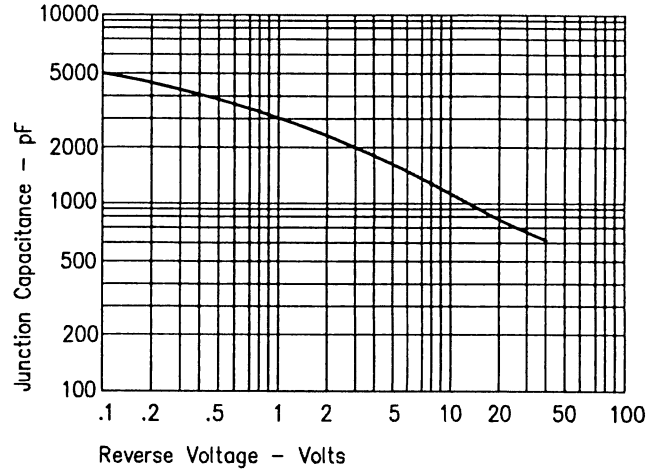


Figure 4
Maximum Forward Power Dissipation

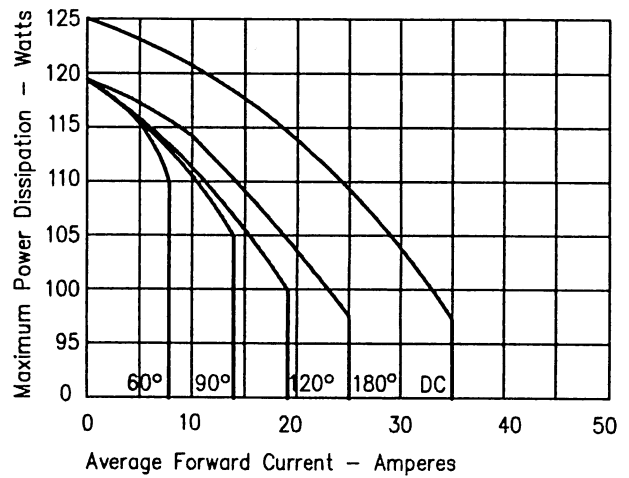


Figure 2
Typical Reverse Characteristics

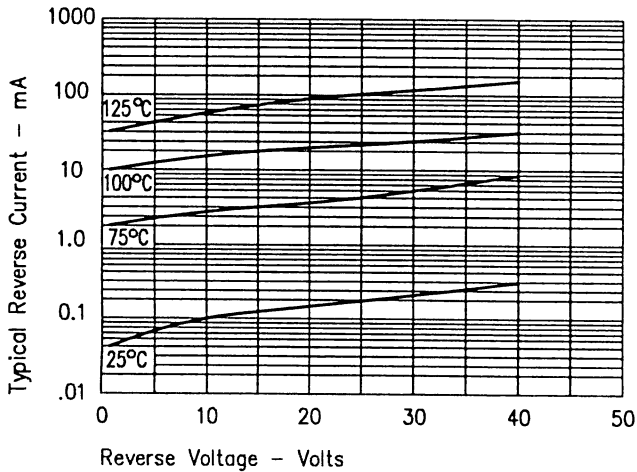


Figure 5
Maximum Forward Power Dissipation

