

DIGITRON SEMICONDUCTORS

1N5829-1N5831

25 AMP SCHOTTKY RECTIFIERS

MAXIMUM RATINGS

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

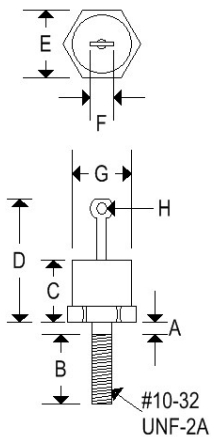
ELECTRICAL CHARACTERISTICS

Symbol	Characteristic	1N5829	1N5830	1N5831	Test Condition
V _{RWM}	Working peak reverse voltage	20V	30V	40V	
V _{RRM}	Repetitive peak reverse voltage	20V	30V	40V	
I _{F(AV)}	Average forward current	25A	25A	25A	T _C = 97°C, square wave, R _{θJC} = 1.75°C/W
I _{FSM}	Maximum surge current	800A	800A	800A	8.3ms, half sine, T _J = 125°C
V _{FM}	Maximum peak forward voltage	.360V	.370V	.380V	I _{FM} = 10A: T _J = 25°C*
V _{FM}	Maximum peak forward voltage	.440V	.460V	.480V	I _{FM} = 25A: T _J = 25°C*
V _{FM}	Maximum peak forward voltage	.720V	.770V	.820V	I _{FM} = 78.5A: T _J = 25°C*
I _{RM}	Maximum peak reverse current	150mA	150mA	150mA	V _{RRM} , T _J = 100°C
I _{RM}	Maximum peak reverse current	3.0mA	3.0mA	3.0mA	V _{RRM} , T _J = 25°C
C _J	Typical junction capacitance	1650pF	1650pF	1650pF	T _J = 25°C, V _R = 5V, f = 1MHz

* Pulse test: Pulse width 300µsec, duty cycle 2%.

MECHANICAL CHARACTERISTICS

Case	DO-4(R)
Marking	Alpha-numeric
Normal polarity	Cathode is stud
Reverse polarity	Anode is stud (add "R" suffix)



	DO-4(R)			
	Inches		Millimeters	
	Min	Max	Min	Max
A	-	0.078	-	1.981
B	0.422	0.453	10.719	11.506
C	-	0.405	-	10.287
D	-	0.800	-	20.320
E	0.420	0.440	10.668	11.176
F	-	0.250	-	6.350
G	-	0.424	-	10.770
H	0.066	-	1.676	-

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

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