

# DIGITRON SEMICONDUCTORS

1N6095-1N6096

25 AMP SCHOTTKY RECTIFIER

## MAXIMUM RATINGS

Symbol	Parameter	Value
$T_{STG}$	Storage temperature range	-65 to +150°C
$T_J$	Operating junction temperature range	-65 to +150°C
$R_{eJC}$	Maximum thermal resistance	2.0°C/W junction to Case
	Maximum mounting torque	15 inch pounds maximum
	Weight	0.2 ounces (6.0 grams) typical

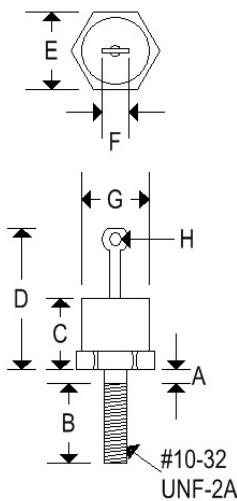
## ELECTRICAL CHARACTERISTICS

Symbol	Parameter	1N6095	1N6096	Test Conditions
VRWM	Working peak reverse voltage	30V	40V	
VRRM	Repetitive peak reverse voltage	30V	40V	
$I_{F(AV)}$	Average forward current	25A		$T_C = 70^\circ\text{C}$ , half sine wave, $R_{eJC} = 2.0^\circ\text{C}/\text{W}$
$I_{FSM}$	Maximum surge current	400A		8.3ms, half sine
$I_{R(OV)}$	Maximum repetitive peak reverse current	2A		$f = 1 \text{ KHz}, 25^\circ\text{C}, 1 \mu\text{sec}$ square wave
$V_{FM}$	Maximum peak forward voltage	.86V		$I_{FM} = 78.5\text{A}, T_C = 70^\circ\text{C}^*$
$V_{FM}$	Maximum peak forward voltage	.60V		$I_{FM} = 5\text{A}, T_J = 25^\circ\text{C}^*$
$I_{RM}$	Maximum peak reverse current	250mA		$V_{RRM}, T_J = 125^\circ\text{C}^*$
$I_{RM}$	Maximum peak reverse current	1.5mA		$V_{RRM}, T_J = 25^\circ\text{C}$
$C_J$	Typical junction capacitance	6000pF		$V_R = 1.0\text{V}, T_J = 25^\circ\text{C}$

Pulse test: Pulse width 300  $\mu\text{sec}$ , duty cycle 2%

## MECHANICAL CHARACTERISTICS

Case	DO-4
Marking	Alpha numeric
Polarity	Cathode is stud, reverse polarity = anode is stud



	DO-4			
	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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Figure 1  
Typical Forward Characteristics

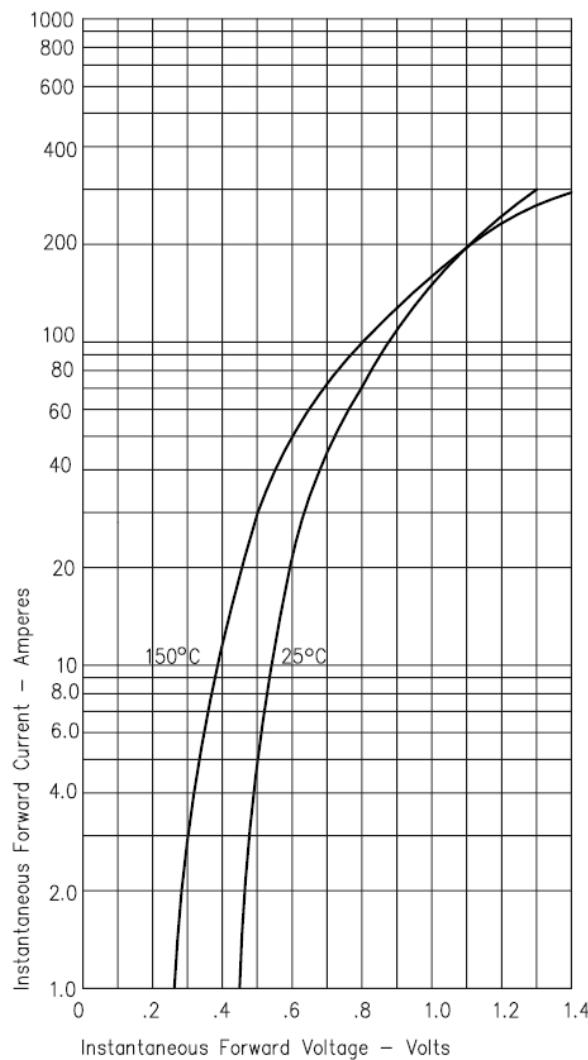


Figure 2  
Typical Reverse Characteristics

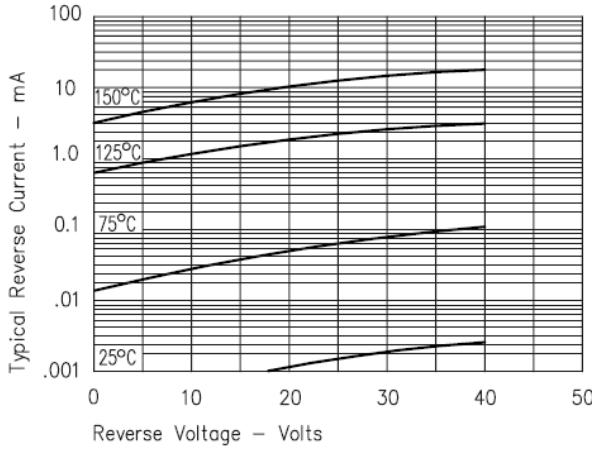


Figure 3  
Typical Junction Capacitance

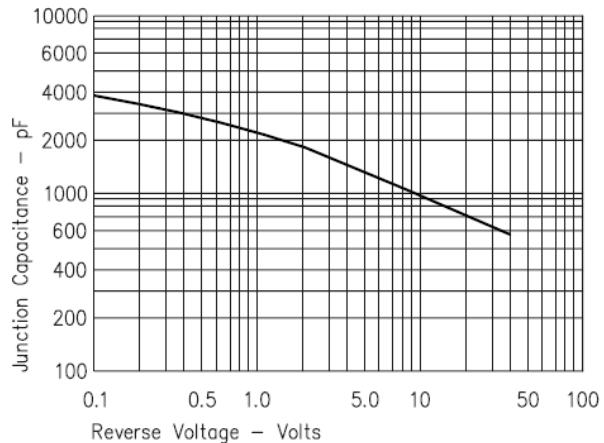


Figure 4  
Forward Current Derating

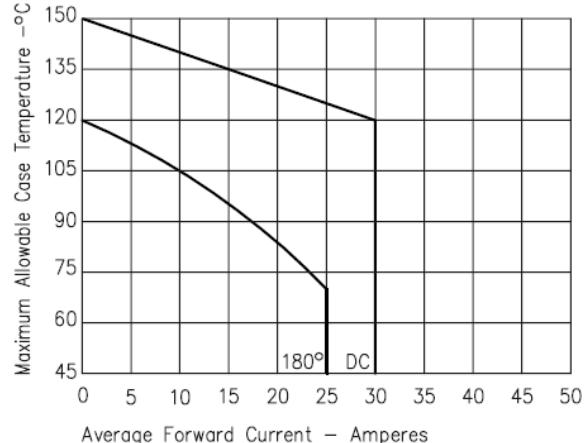


Figure 5  
Maximum Forward Power Dissipation

