

DIGITRON SEMICONDUCTORS

1N6097-1N6098

50 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 _{θJC}	Maximum thermal resistance	1.0°C/W junction to Case
	Maximum mounting torque	30 inch pounds maximum
	Weight	0.54 ounces (15.3 grams) typical

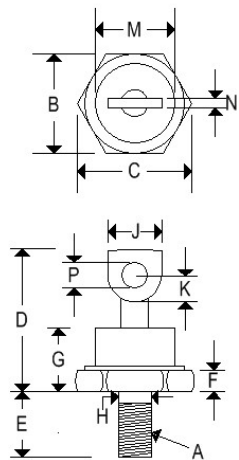
ELECTRICAL CHARACTERISTICS

Symbol	Parameter	1N6097	1N6098	Test Condition
V _{RWM}	Working peak reverse voltage	30V	40V	
V _{RRM}	Peak repetitive reverse voltage	30V	40V	
I _{F(AV)}	Average forward current	50A		T _C = 70°C, square wave, R _{θJC} = 1.0°C/W
I _{FSM}	Maximum surge current	800A		8.3ms, half sine T _J = 150°C
I _{R(OV)}	Maximum repetitive peak reverse current	2A		f = 1 KHz, 25°C, 1 μsec square wave
V _{FM}	Maximum peak forward voltage	.60V		I _{FM} = 10A, T _J = 25°C*
V _{FM}	Maximum peak forward voltage	.86V		I _{FM} = 157A, T _J = 70°C*
I _{RM}	Maximum peak reverse current	250mA		V _{RRM} , T _J = 125°C*
I _{RM}	Maximum peak reverse current	2mA		V _{RRM} , T _J = 25°C
C _J	Typical junction capacitance	7000pF		V _R = 1.0V, T _J = 25°C

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

MECHANICAL CHARACTERISTICS

Case	DO-5(R)
Marking	Alpha numeric
Normal polarity	Cathode is stud
Reverse polarity	Anode is stud (add "R" suffix)



	DO-5(R)			
	Inches		Millimeters	
	Min	Max	Min	Max
A	¼-28 UNF2A threads			
B	0.669	0.688	16.990	17.480
C	-	0.794	-	20.160
D	-	1.000	-	25.400
E	0.422	0.453	10.720	11.510
F	0.115	0.200	2.920	5.080
G	-	0.450	-	11.430
H	0.220	0.249	5.580	6.320
J	0.250	0.375	6.350	9.530
K	0.156	-	3.960	-
M	-	0.667	-	16.940
N	0.030	0.080	0.760	2.030
P	0.140	0.175	3.560	4.450

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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