

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

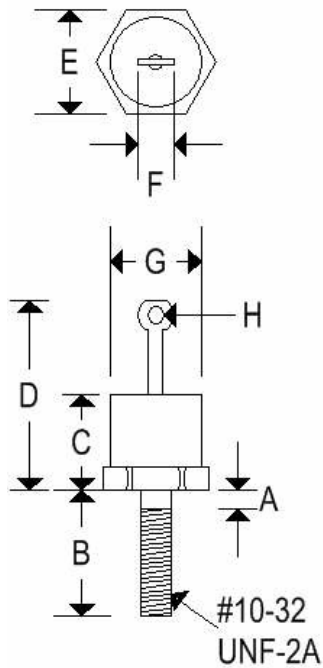
Symbol	Parameter	Value
T _{STG}	Storage temperature range	-65 to +150°C
T _J	Operating junction temperature range	-65 to +150°C
R _{θJC}	Maximum thermal resistance	2.0°C/W junction to Case
	Maximum mounting torque	15 inch pounds maximum
	Weight	0.2 ounces (6.0 grams) typical

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

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°C, half sine wave, R _{θJC} = 2.0°C/W
I _{FSM}	Maximum surge current	400A		8.3ms, half sine
I _{R(OV)}	Maximum repetitive peak reverse current	2A		f = 1 KHz, 25°C, 1 μsec square wave
V _{FM}	Maximum peak forward voltage	.86V		I _{FM} = 78.5A, T _C = 70°C*
V _{FM}	Maximum peak forward voltage	.60V		I _{FM} = 5A, T _J = 25°C*
I _{RM}	Maximum peak reverse current	250mA		V _{R(RM)} , T _J = 125°C*
I _{RM}	Maximum peak reverse current	1.5mA		V _{R(RM)} , T _J = 25°C
C _J	Typical junction capacitance	6000pF		V _R = 1.0V, T _J = 25°C

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	-

Figure 1
Typical Forward Characteristics

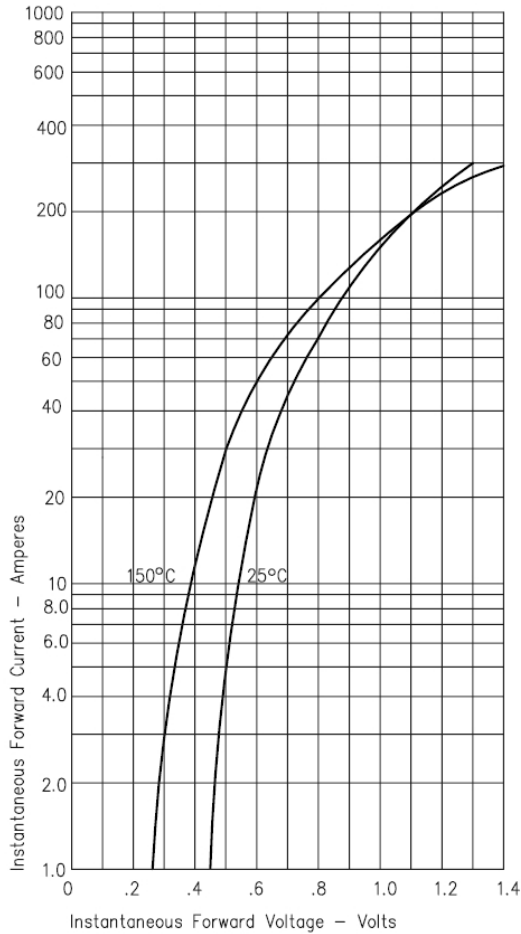


Figure 3
Typical Junction Capacitance

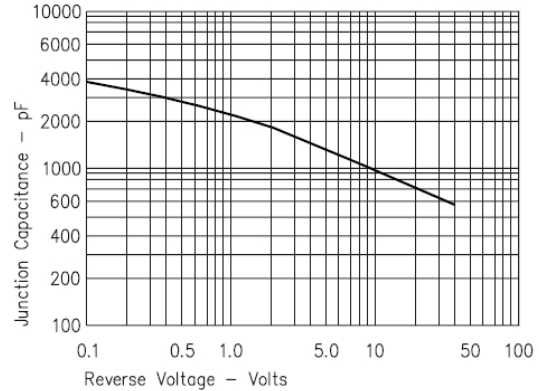


Figure 4
Forward Current Derating

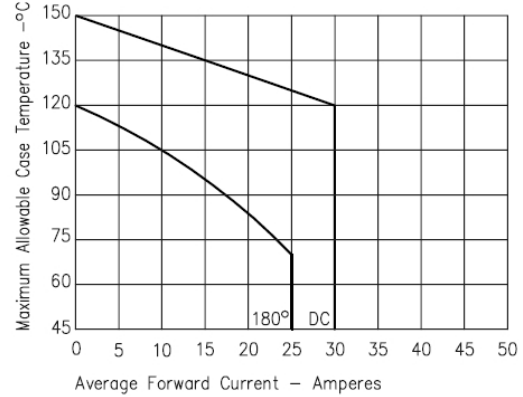


Figure 2
Typical Reverse Characteristics

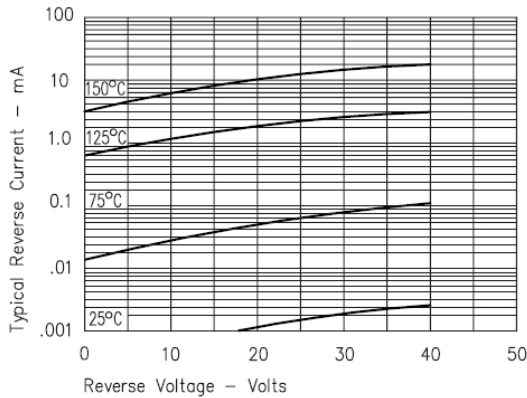


Figure 5
Maximum Forward Power Dissipation

