

1N2054-1N2068

HIGH POWER RECTIFIERS

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

Part number	1N2054	1N2055	1N2056	1N2057	1N2058	1N2059	1N2060	1N2061	1N2062	1N2063	1N2064	1N2065	1N2066	1N2067	1N2068
Peak inverse voltage	50V	100V	150V	200V	250V	300V	350V	400V	450V	500V	600V	700V	800V	900V	1000V

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

Characteristics	Symbol	Value	Test Conditions
Average forward current	I _{F(AV)}	250 Amps	T _C = 135°C, square wave, R _{θJC} = 0.18°C/W
Maximum surge current	I _{FSM}	5000 Amps	8.3ms, half sine, T _J = 190°C
Maximum I ² t for fusing	I ² t	104125 A ² s	8.3ms
Maximum peak forward voltage	V _{FM}	1.3 Volts	I _{FM} = 300A, T _J = 25°C*
Maximum peak reverse current	I _{RM}	10 mA	V _{RRM} , T _J = 150°C
Maximum reverse current	I _{RM}	75 μA	V _{RRM} , T _J = 25°C

*Pulse test: Pulse width 300μs. Duty cycle 2%.

THERMAL CHARACTERISTICS

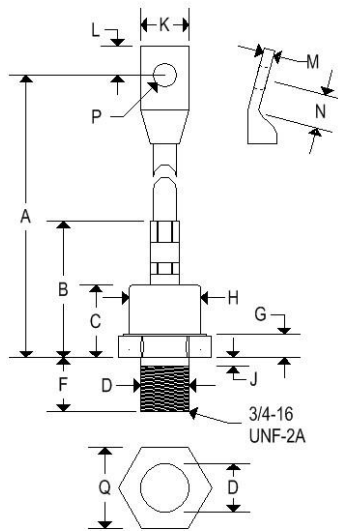
Characteristics	Symbol	Value
Storage temperature range	T _{stg}	-65 to +190°C
Operating junction temperature range	T _J	-65 to +190°C
Maximum thermal resistance	R _{θJC}	0.18°C/W junction to case
Typical thermal resistance (greased)	R _{θCS}	0.08°C/W case to sink
Mounting torque		300-325 inch pounds
Weight		8.5 ounces (240 grams) typical

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MECHANICAL CHARACTERISTICS

Case	DO-9(R)
Marking	Alpha-numeric
Normal polarity	Cathode is stud
Reverse polarity	Anode is stud (add "R" suffix)



	DO-9(R)			
	Inches		Millimeters	
	Min	Max	Min	Max
A	5.300	5.900	134.60	149.90
B	-	2.100	-	53.340
C	-	1.120	-	28.450
D	-	0.749	-	19.020
F	0.793	0.828	20.140	21.030
G	0.310	0.400	7.870	9.140
H	-	1.100	-	27.940
J	-	0.125	-	3.180
K	-	0.755	-	19.180
L	0.325	-	8.255	-
M	-	0.170	-	4.320
N	0.375	-	9.525	-
P	0.265	0.350	6.740	8.890
Q	1.218	1.250	30.940	31.750

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Figure 1
Typical Forward Characteristics

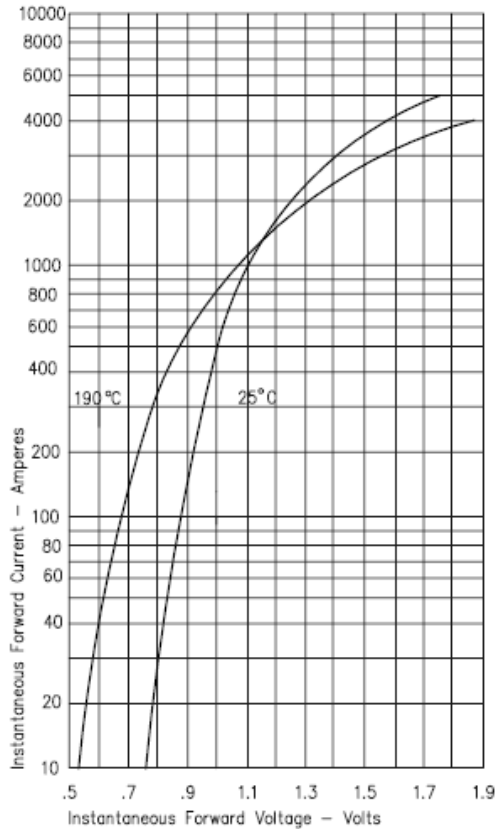


Figure 2
Typical Reverse Characteristics

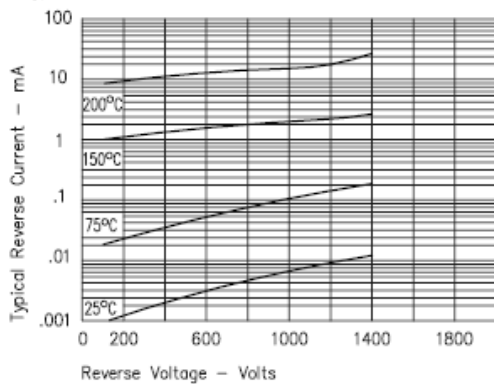


Figure 3
Forward Current Derating

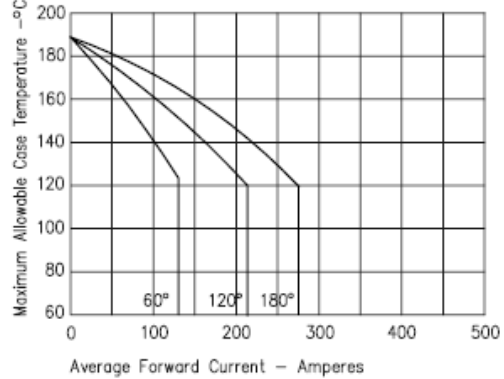


Figure 4
Maximum Forward Power Dissipation

