

150 Amp GPP PASSIVATED STUD POWER DIODE

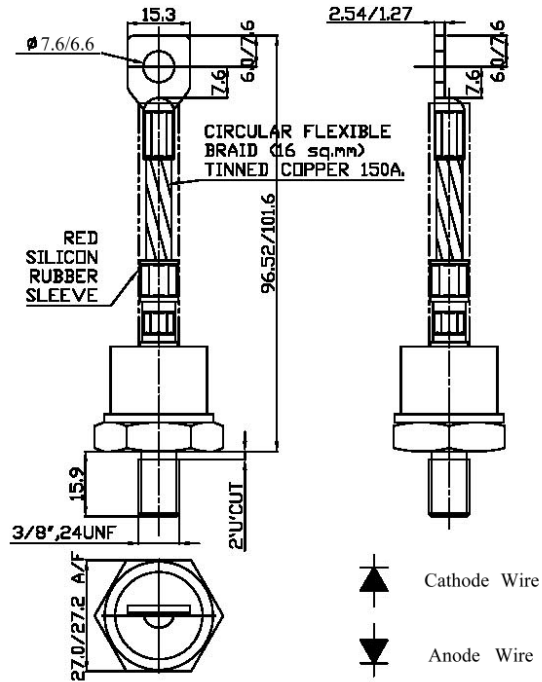
Description

150U(R)120



DO-8

Mechanical Dimensions



Dimensions in mm

150U120 Anode to Stud Wire; 150UR120 Cathode to Stud Wire

Symbol	Characteristic	Conditions	T _c	Value	Unit
V _{RRM}	Repetitive peak reverse voltage		25	200~1600	V
I _{RRM}	Repetitive peak reverse current	V = V _{RRM}	25	<15	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin, 50 Hz, T _{CASE} = 130°C		150	A
I _{RMS}	RMS forward current			240	A
I _{FSM}	Surge forward current	Sine wave, 10 ms	180	3600	A
I ² t	I ² t	Sine wave, 10 ms		64800	A ² s
V _{FM}	Forward voltage	Forward current = 450 A	25	1.5	V
r _F	Forward slope resistance		180	0.9	mΩ

MOUNTING

R _{th(j-c)}	Thermal impedance	Junction to case, 180° sine		<0.3	C/W
R _{th(c-h)}	Thermal impedance	Case to heatsink		0.05	°C/W
T _j	Max. junction temperature			125	°C
T _{stg}	Storage temperature			-40 175	°C
M	Mounting Torque			<12	NM
	Weight			180	g
	Outline drawing reference			DO-8 & DO-30	

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Figure 1
Typical Forward Characteristics

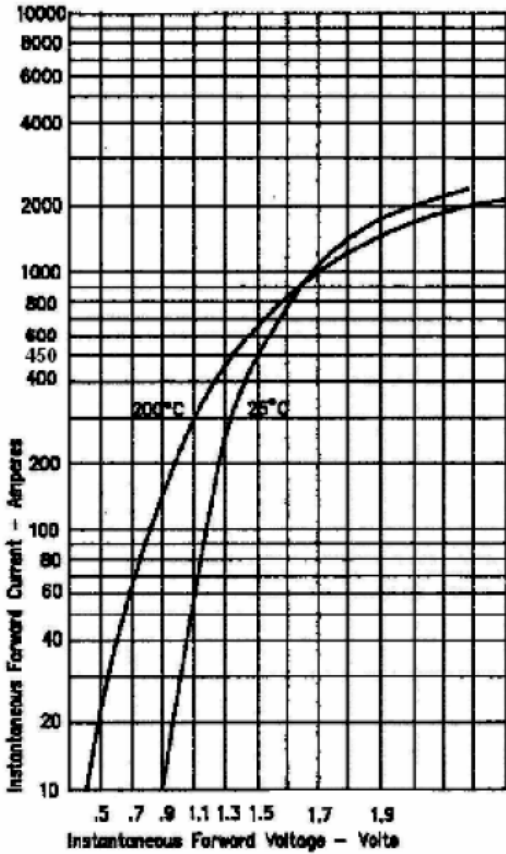


Figure 3
Forward Current Derating

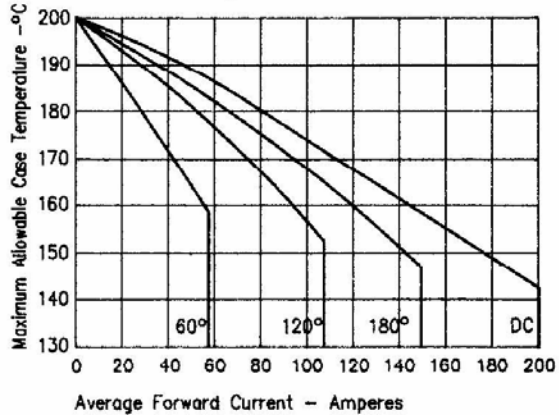


Figure 4
Maximum Forward Power Dissipation

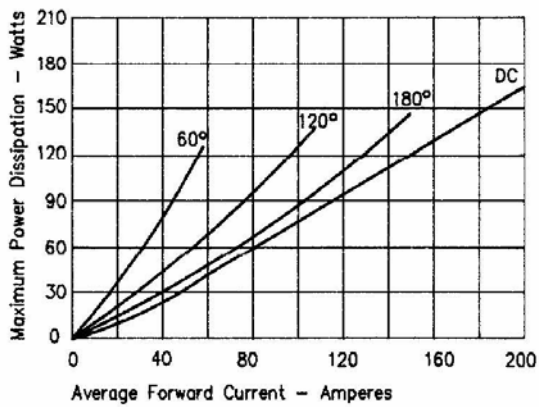


Figure 2
Typical Reverse Characteristics

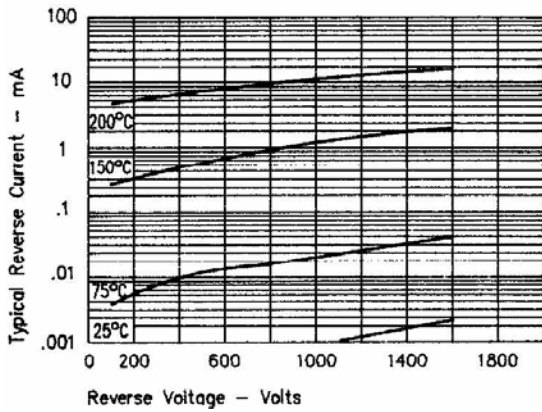


Figure 5
Transient Thermal Impedance

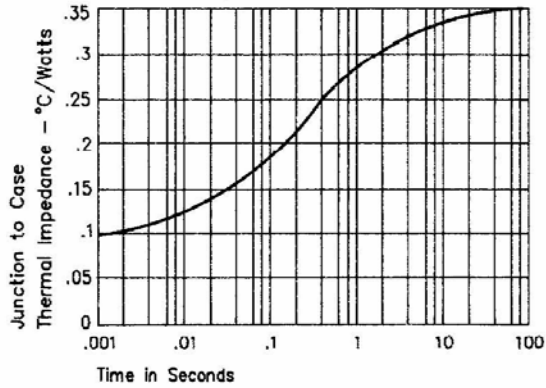


Figure 6
Maximum Nonrepetitive Surge Current

