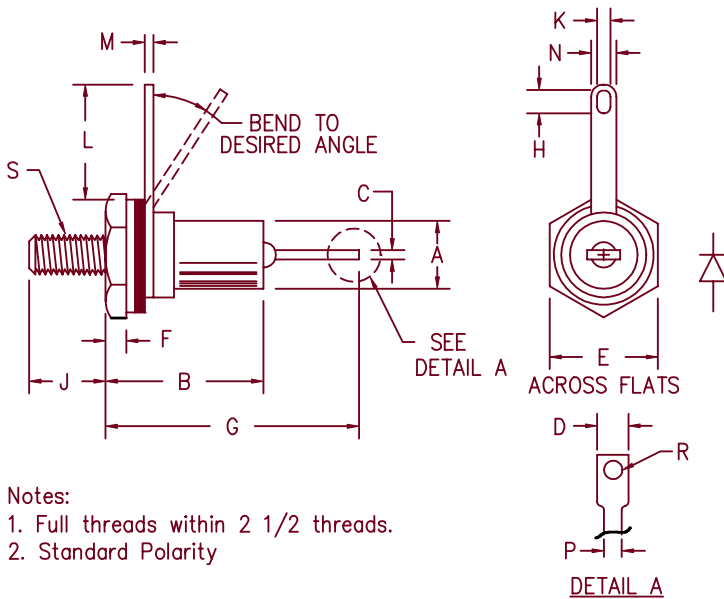


# Military Silicon Power Rectifier 99016 — 1N2153



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	----	.424	----	----	
B	.400	----	----	----	
C	----	.035	----	----	
D	----	.150	----	----	
F	.062	.150	----	----	
G	.800	1.00	----	----	
H	.110	.140	----	----	
J	.422	.453	----	----	
K	.045	.075	----	----	
L	.530	.600	----	----	
M	.022	.038	----	----	
N	.110	.140	----	----	
R	.060	----	----	----	Dia. 1
S	10-32 NF-2A		----	----	

Microsemi Catalog Number	Repetitive Peak Reverse Voltage	Transient Peak Reverse Voltage
99016-1N2153	600	600

- MIL-DWG-99016 JAN Equivalent
- Glass Passivated Die
- Glass to metal construction
- Isolated mounting base
- $V_{RRM}$  600 Volts

## Electrical Characteristics

Average forward current	$I_F(AV)$ 6 Amps	$T_C = 100^\circ\text{C}$ , Half sine wave, $R_{\theta JC} = 3.0^\circ\text{C/W}$ 8.3ms, half sine, $T_J = 100^\circ\text{C}$
Maximum surge current	$I_{FSM}$ 50 Amps	
Max. peak forward voltage	$V_{FM}$ 1.5 Volts	$I_{FM} = 6A$ ; $T_C = 25^\circ\text{C}$
Max. peak reverse current per leg	$I_{RRM}$ 50 $\mu\text{A}$	$V_{RRM}$ , $T_C = 25^\circ\text{C}$
Max. peak reverse current per leg	$I_{RRM}$ 1.0 mA	$V_{RRM}$ , $T_C = 150^\circ\text{C}$

## Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	$-65^\circ\text{C}$ to $150^\circ\text{C}$
Operating junction temp range	$T_J$	$-65^\circ\text{C}$ to $150^\circ\text{C}$
Maximum thermal resistance	$R_{\theta JC}$	$3.0^\circ\text{C/W}$ Junction to case
Mounting torque		15 inch pounds maximum (10-32NF screw)
Weight		.3 ounces (8.2 grams) typical

9-26-00 Rev. IR

# 99016 - 1N2153

Figure 1  
Typical Forward Characteristics - Per Leg

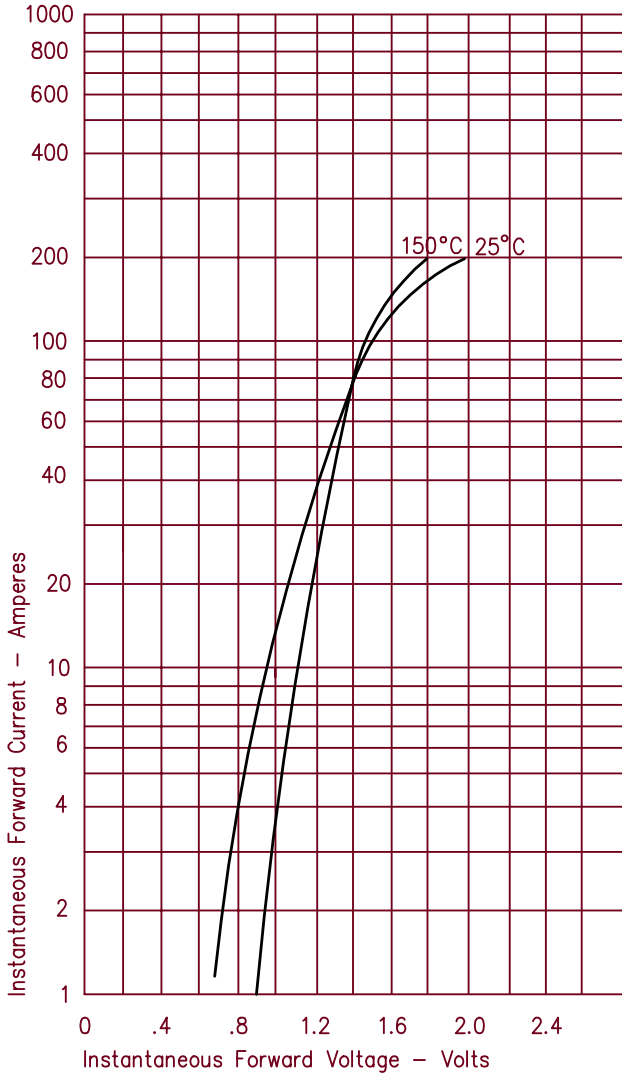


Figure 3  
Forward Current Derating - Per Leg

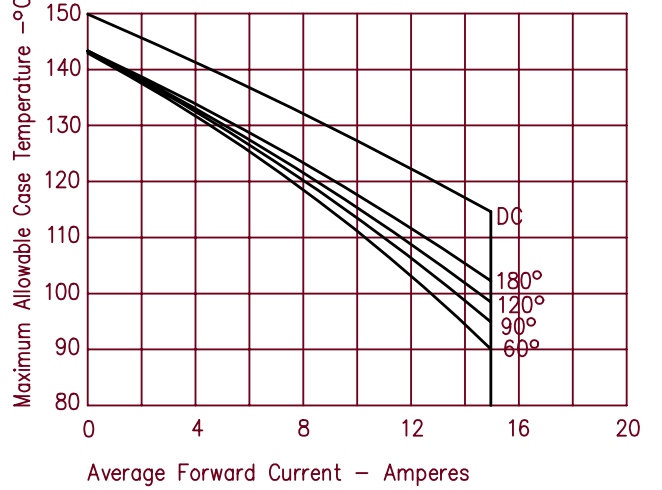


Figure 4  
Maximum Forward Power Dissipation - Per Leg

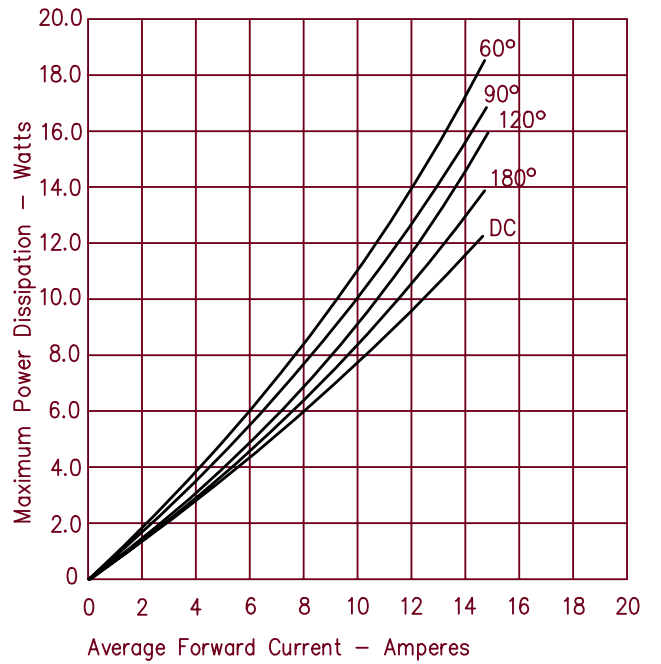


Figure 2  
Typical Reverse Characteristics

