

ON Semiconductor

Is Now

The logo for onsemi, featuring the word "onsemi" in a dark teal, lowercase, sans-serif font. The letter "i" is stylized with a white dot and a teal vertical bar. A small orange triangle is positioned above the top right of the "i". A trademark symbol (TM) is located to the right of the logo.

To learn more about onsemi™, please visit our website at
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MSD6150

Dual Diode Common Anode



ON Semiconductor®

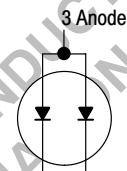
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MAXIMUM RATINGS (EACH DIODE)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	70	Vdc
Peak Forward Recurrent Current	I_F	200	mAdc
Peak Forward Surge Current (Pulse Width = 10 μ sec)	$I_{FM(surge)}$	500	mAdc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	$P_D^{(1)}$	625 5.0	mW mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	$T_J, T_{stg}^{(1)}$	-55 to +135	$^\circ\text{C}$



TO-92
(TO-226AA)
CASE 29-11
STYLE 4



3 Anode
Cathode 1 2 Cathode

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted) (EACH DIODE)

Characteristic	Symbol	Min	Typ	Max	Unit
Breakdown Voltage ($I_{BR} = 100 \mu\text{Adc}$)	$V_{(BR)}$	70	—	—	Vdc
Reverse Current ($V_R = 50 \text{Vdc}$)	I_R	—	—	0.1	μAdc
Forward Voltage ($I_F = 10 \text{mAdc}$)	V_F	—	0.80	1.0	Vdc
Capacitance ($V_R = 0$)	C	—	5.0	8.0	pF
Reverse Recovery Time ($I_F = I_R = 10 \text{mAdc}$, $V_R = 5.0 \text{Vdc}$, $i_{rr} = 1.0 \text{mAdc}$)	t_{rr}	—	—	100	ns

1. Continuous package improvements have enhanced these guaranteed Maximum Ratings as follows: $P_D = 1.0 \text{ W @ } T_C = 25^\circ\text{C}$, Derate above $8.0 \text{ mW}/^\circ\text{C}$, $P_D = 10 \text{ W @ } T_C = 25^\circ\text{C}$, Derate above $80 \text{ mW}/^\circ\text{C}$, $T_J, T_{stg} = -55 \text{ to } +150^\circ\text{C}$, $\theta_{JC} = 12.5^\circ\text{C}/\text{W}$, $\theta_{JA} = 125^\circ\text{C}$.

MSD6150

TYPICAL CHARACTERISTICS

Curves Applicable to Each Cathode

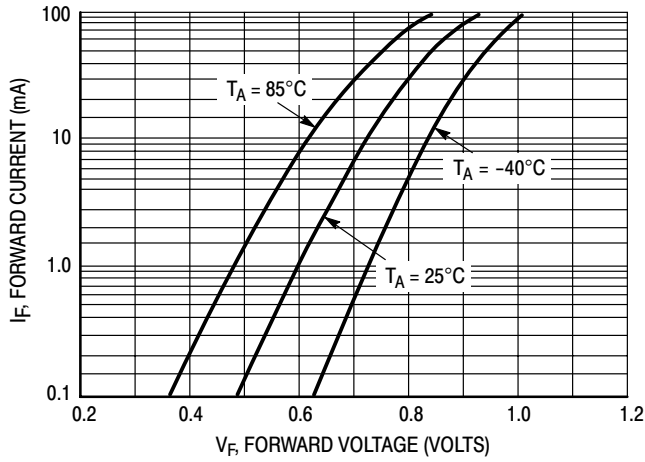


Figure 1. Forward Voltage

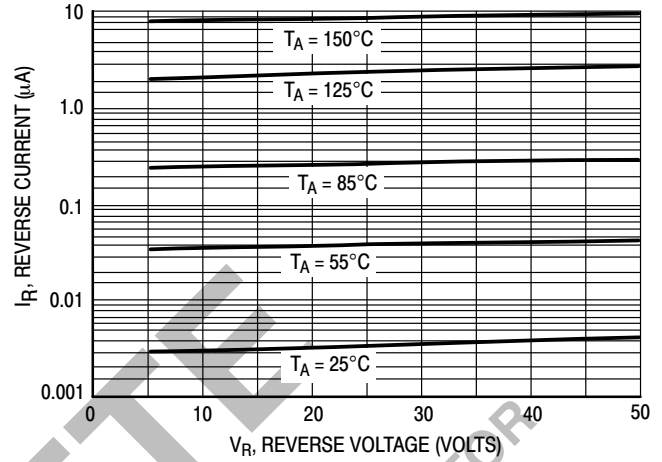


Figure 2. Leakage Current

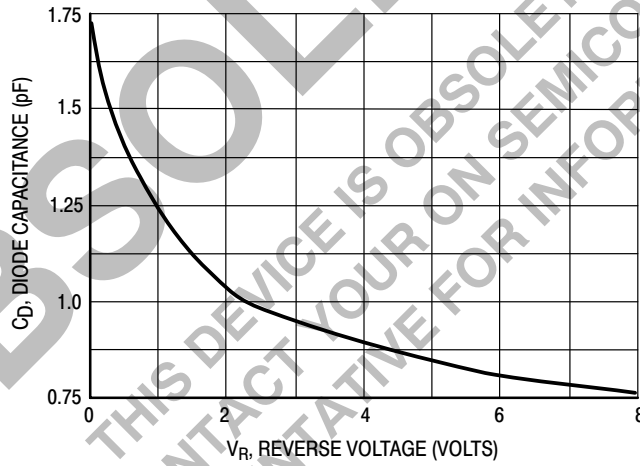
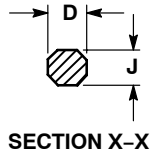
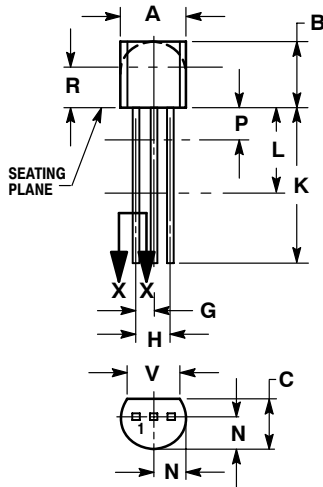


Figure 3. Capacitance

MSD6150

PACKAGE DIMENSIONS

TO-92 (TO-226AA) CASE 29-11 ISSUE AL



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. LEAD DIMENSION IS UNCONTROLLED IN P AND BEYOND DIMENSION K MINIMUM.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.175	0.205	4.45	5.20
B	0.170	0.210	4.32	5.33
C	0.125	0.165	3.18	4.19
D	0.016	0.021	0.407	0.533
G	0.045	0.055	1.15	1.39
H	0.095	0.105	2.42	2.66
J	0.015	0.020	0.39	0.50
K	0.500	---	12.70	---
L	0.250	---	6.35	---
N	0.080	0.105	2.04	2.66
P	---	0.100	---	2.54
R	0.115	---	2.93	---
V	0.135	---	3.43	---

STYLE 4:

1. CATHODE
2. CATHODE
3. ANODE

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