



# DIDR10150

## 1500V 10A DAMPER RECTIFIER DIODE

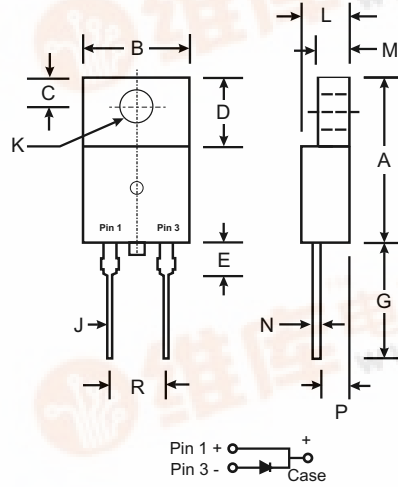
ADVANCE INFORMATION

### Features

- Glass Passivated Die Construction
- Diffused Junction
- Super-Fast Recovery Times for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 50A Peak
- Low Reverse Leakage Current
- Plastic Material: UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 3.0 grams (approx.)



ITO-220AC		
Dim	Min	Max
A	14.8	15.4
B	9.6	10.3
C	2.55	2.85
D	6.3	6.9
E	—	4.1
G	13.0	13.8
J	.5	.9
K	3.0	3.4
L	3.5	4.8
M	2.3	3.1
N	.4	.8
P	2.5	2.9
R	4.83	5.33
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	DIDR10150	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	1500	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	1060	V
Average Rectified Output Current	I <sub>O</sub>	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50	A
Forward Voltage @ I <sub>F</sub> = 10A	V <sub>FM</sub>	2.8	V
Peak Reverse Current at Rated DC Blocking Voltage @ T <sub>C</sub> = 25°C @ T <sub>J</sub> = 90°C	I <sub>RM</sub>	50 500	μA
Maximum Recovery Time (Note 1) (Note 2)	t <sub>rr</sub>	200 500	ns
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	50	pF
Typical Thermal Resistance Junction to Lead 1/8" From Body	R <sub>θJC</sub>	25	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +125	°C

- Notes:
1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A.
  2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 0.5A 90% Recovery Point
  3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.



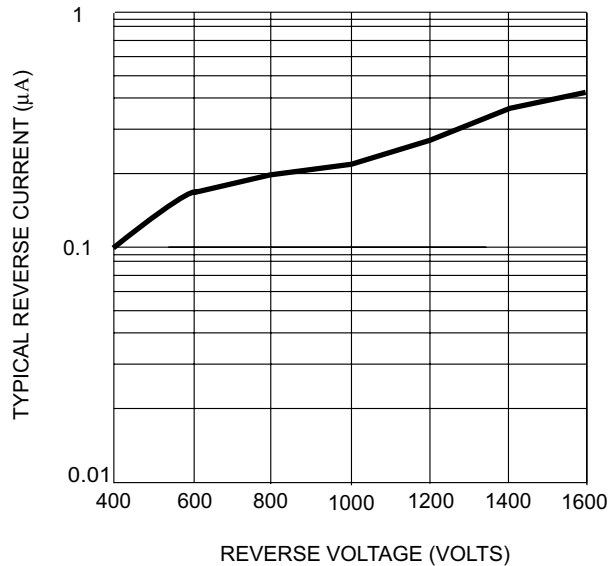


Fig. 1, Typical Reverse Current vs Reverse Voltage

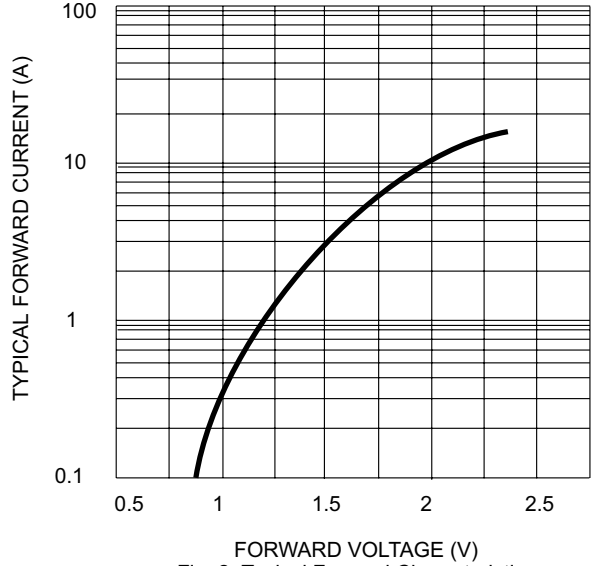


Fig. 2 Typical Forward Characteristics

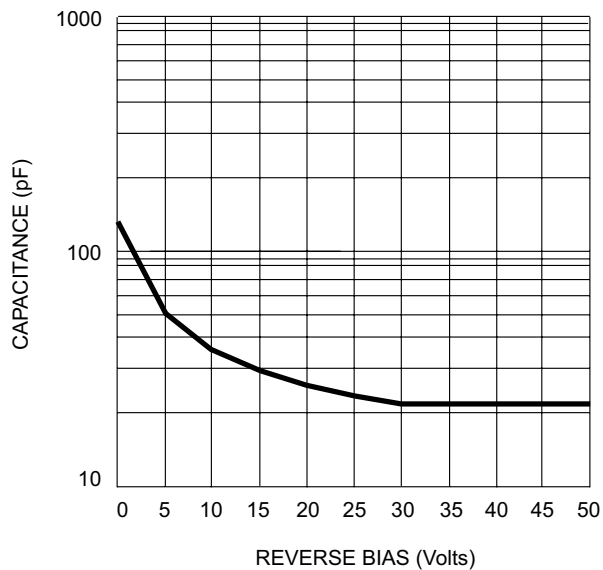


Fig. 3, Capacitance vs Reverse Bias