

# Maximum Ratings (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub>	150	V
Average Rectified Output Current	lo	15	А
Non-Repetitive Peak Forward Surge Current 8.3ms	I <sub>FSM</sub>	250	A

# **Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 6)	R <sub>θJA</sub>	88	°C/W
Typical Thermal Resistance Junction to Ambient (Note 7)	R <sub>θJA</sub>	18	°C/W
Operating and Storage Temperature Range	T <sub>J,</sub> T <sub>STG</sub>	-55 to +150	°C

# Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop V	VF		0.78	0.86	V	$I_F = 15A, T_J = +25^{\circ}C$
	۴F	_	0.64	0.72	•	I <sub>F</sub> = 15A, T <sub>J</sub> = +125°C
Leakage Current (Note 8)	1-	—	—	100	μA	V <sub>R</sub> = 150V, T <sub>J</sub> = +25°C
	IR	—	—	18	mA	V <sub>R</sub> = 150V, T <sub>J</sub> = +125°C

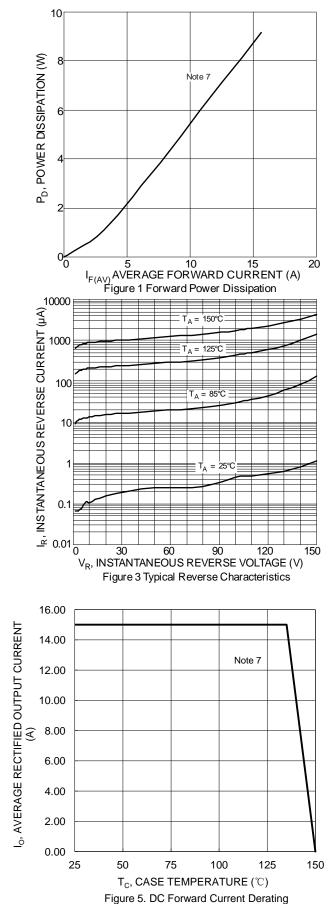
Notes:

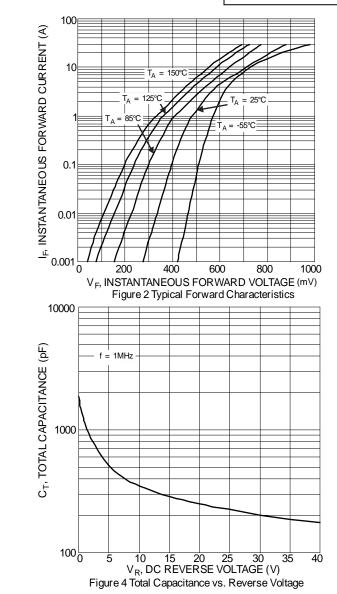
1\*MRP FR-4 PC board, 2oz.
2inch\*2inch Al board + 50mm\*50mm\*23mm Al heatsink.
Short duration pulse test used to minimize self-heating effect.



NEW PRODUCT

### SDT15150P5





SDT15150P5 Document number: DS39565 Rev. 5 - 2 Downloaded from Arrow.com.

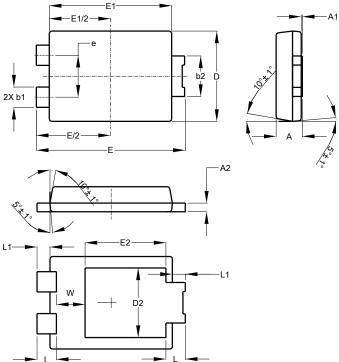


### **Package Outline Dimensions**

Please see http://www.diodes.com/package-outlines.html for the latest version.

#### PowerDI-5



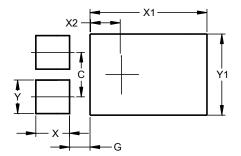


	PowerDI-5				
Dim	Min	Max	Тур		
Α	1.05	1.15	1.10		
A1	0.00	0.05			
A2	0.33	0.43	0.381		
b1	0.80	0.99	0.89		
b2	1.70	1.88	1.78		
D	3.90	4.05	3.966		
D2			3.054		
E	6.40	6.60	6.51		
е			1.84		
E1	5.30	5.45	5.37		
E2			3.549		
L	0.75	0.95	0.85		
L1	0.50	0.65	0.57		
W	1.10	1.41	1.255		
All Dimensions in mm					

## Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

#### PowerDI-5



Dimensions	Value (in mm)
С	1.840
G	0.852
Х	1.400
X1	4.860
X2	1.310
Y	1.390
Y1	3.360



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