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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **FFPF10U150S**

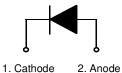
### **Features**

- · High voltage and high reliability
- · High speed switching
- Low forward voltage

## **Applications**

 Suitable for damper diode in horizontal deflection circuits





### **DAMPER DIODE**

## Absolute Maximum Ratings T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	1500	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @ T <sub>C</sub> = 125°C	10	Α
I <sub>FSM</sub>	Non-repetitive Peak Surge Current 60Hz Single Half-Sine Wave	100	Α
T <sub>J,</sub> T <sub>STG</sub>	Operating Junction and Storage Temperature	- 65 to +150	°C

### **Thermal Characteristics**

Symbol		Parameter	Value	Units	
	R <sub>e,IC</sub>	Maximum Thermal Resistance, Junction to Case	2.0	°C/W	

## Electrical Characteristics T<sub>C</sub>=25 °C unless otherwise noted

Symbol	Parameter		Min.	Тур.	Max.	Units
V <sub>FM</sub> *	Maximum Instantaneous Forward Voltage					V
	I <sub>F</sub> = 10A	T <sub>C</sub> = 25 °C	-	-	1.8	
	I <sub>F</sub> = 10A	T <sub>C</sub> = 25 °C T <sub>C</sub> = 125 °C	-	-	1.7	
I <sub>RM</sub> *	Maximum Instantaneous Reverse Current					μΑ
	@ rated V <sub>B</sub>	$T_C = 25  ^{\circ}C$	-	-	15	
		T <sub>C</sub> = 25 °C T <sub>C</sub> = 125 °C	-	-	200	
t <sub>rr</sub>	Maximum Reverse Recovery Time		-	-	150	ns
	$(I_F = 1A, di/dt = 50A/\mu s)$					
t <sub>fr</sub>	Maximum Forward Recovery Time		-	-	300	ns
	$(I_F = 6.5A, di/dt = 50A/\mu s)$					
$V_{FRM}$	Maximum Forward Recovery Voltage		-	-	14	V

<sup>\*</sup> Pulse Test: Pulse Width=300µs, Duty Cycle=2%

## **Typical Characteristics**

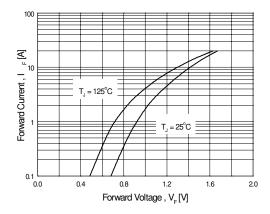


Figure 1. Typical Forward Voltage Drop vs. Forward Current

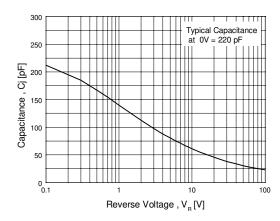


Figure 3. Typical Junction Capacitance

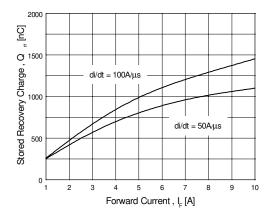


Figure 5. Typical Stored Charge vs. Forward Current

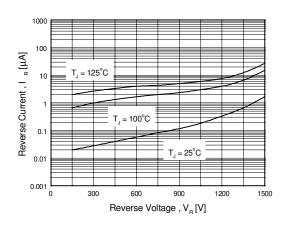


Figure 2. Typical Reverse Current vs. Reverse Voltage

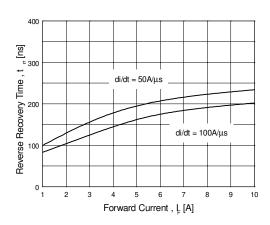


Figure 4. Typical Reverse Recovery Time vs. Forward Current

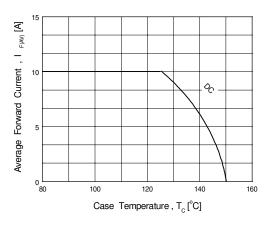
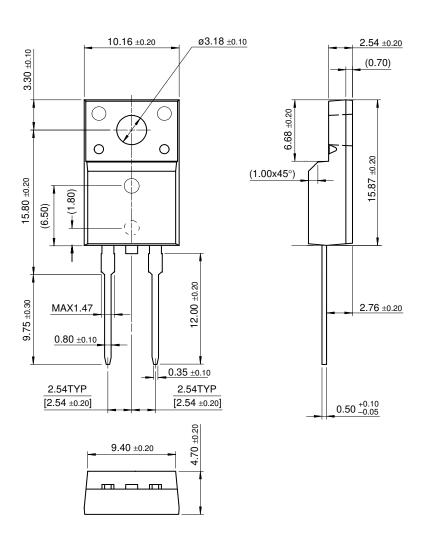


Figure 6. Forward Current Derating Curve

## **Package Dimensions**

# TO-220F 2L



Dimensions in Millimeters

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CROSSVOLT™ HiSeC™ Quiet Series™ DOME™ ISOPLANAR™ SuperSOT™-3 E<sup>2</sup>CMOS<sup>TM</sup> MICROWIRE™ SuperSOT™-6 OPTOLOGIC™ EnSigna™ SuperSOT™-8 FACT™ OPTOPLANAR™ SyncFET™ POP™ FACT Quiet Series™ TinyLogic™

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Datasheet Identification	Product Status	Definition
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