

# FUF5406

## ULTRA FAST RECOVERY RECTIFIER DIODE

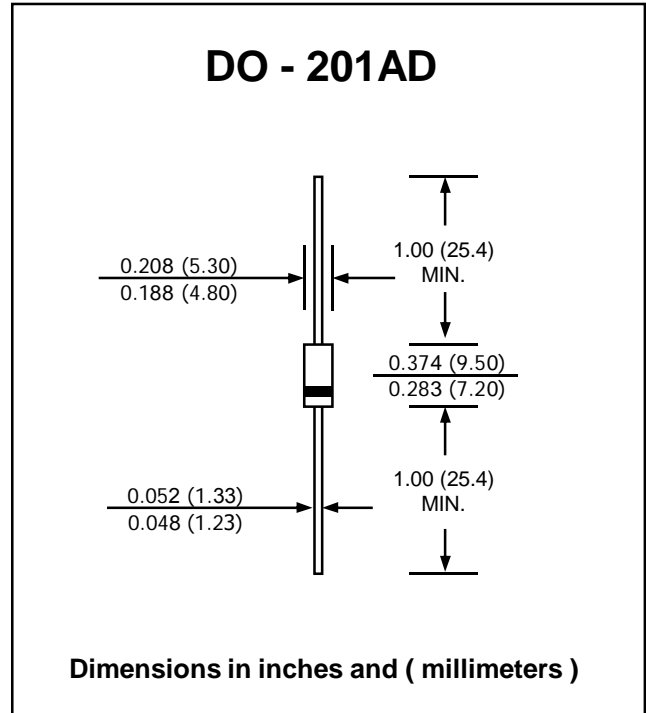
**PRV : 600 Volts**  
**Io : 3.0 Ampere**

**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

**MECHANICAL DATA :**

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 1.21 grams



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 50 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	600	V
Maximum RMS Voltage	VRMS	420	V
Maximum Reverse Voltage	VR	600	V
Maximum Average Forward Current Tc = 100 °C	IF(AV)	3.0	A
Peak One - cycle Surge Forward Current	IFSM	150	A
Maximum Recurrent peak Forward Surge Current	IFRM	30	A
Maximum Peak Forward Voltage at IF = 3 A	VF	1.7	V
Maximum Repetitive Peak Reverse Current at VR	IR	5	µA
Typical Junction Capacitance ( Note 1 )	CJ	45	pF
Maximum Thermal Resistance ( l = 10 mm.)	Rthj-a	30	°C/W
Maximum Reverse Recovery Time ( Note 2 )	Trr	75	ns
Junction Temperature Range	TJ	+ 150	°C
Storage Temperature Range	TSTG	- 55 to + 150	°C

**Notes :**

- ( 1 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC
- ( 2 ) Reverse Recovery Test Conditions : IF = 0.5A, IR = 1A ; IRR = 0.25 A

RATING AND CHARACTERISTIC CURVES ( FUF5406 )

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

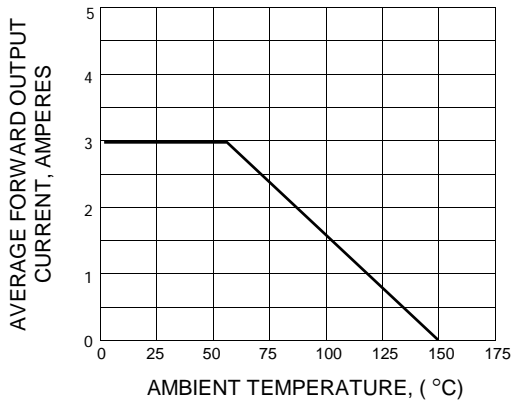


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

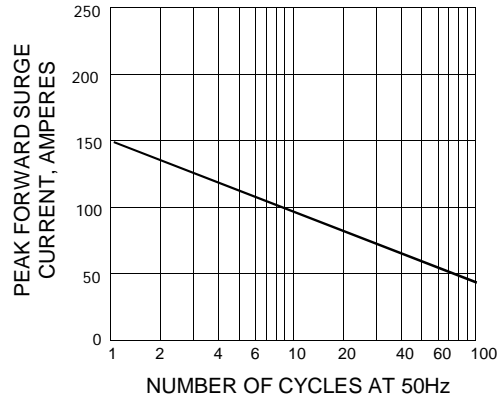


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

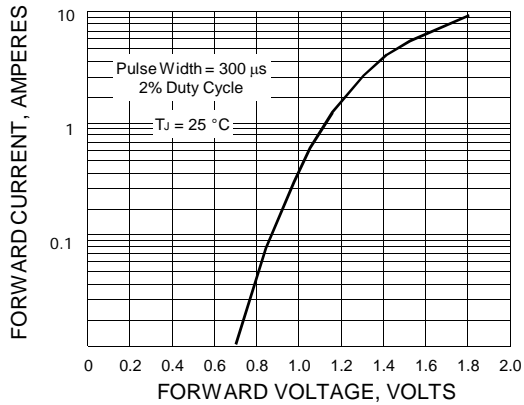


FIG.4 - TYPICAL JUNCTION CAPACITANCE

