

UF5400 ~ UF5408

PRV : 50 ~ 1000 Volts
Io : 3.0 Ampere

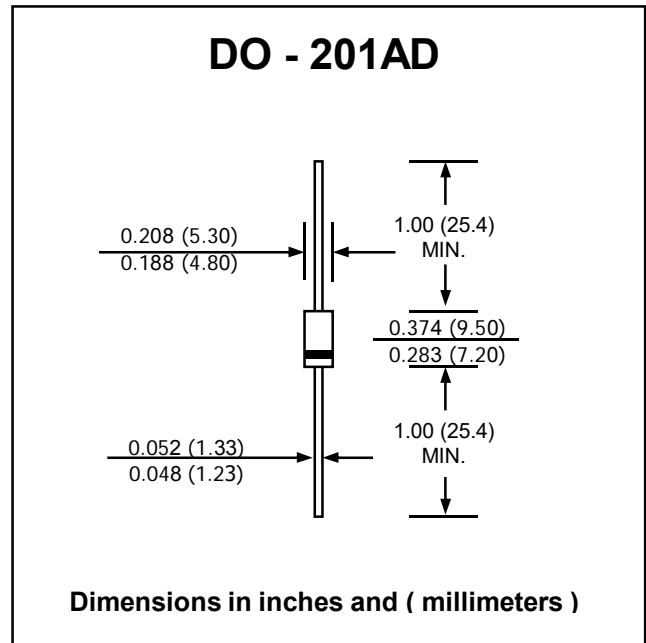
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : DO-201AD Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 1.16 grams

ULTRA FAST EFFICIENT RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

RATING	SYMBOL	UF	UF	UF	UF	UF	UF	UF	UF	UF	UNIT
		5400	5401	5402	5403	5404	5405	5406	5407	5408	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	IF(AV)	3.0									A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method) , Ta = 55°C	IFSM	150									A
Maximum Forward Voltage at IF = 3.0 A	VF	1.0						1.7			V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	IR	10									µA
	IR(H)	75						200			µA
Maximum Reverse Recovery Time ⁽¹⁾ TJ = 25°C	Trr	50						75			ns
Typical Junction Capacitance ⁽²⁾	CJ	45						36			pf
Typical Thermal Resistance ⁽³⁾	RθJA	20									°C/W
Junction Temperature Range	TJ	- 65 to + 150									°C
Storage Temperature Range	TSTG	- 65 to + 150									°C

Notes : (1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

(3) Thermal Resistance from Junction to ambient with 0.375"(9.5mm) lead length, both leads attached to heatsink.

RATING AND CHARACTERISTIC CURVES (UF5400 ~ UF5408)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

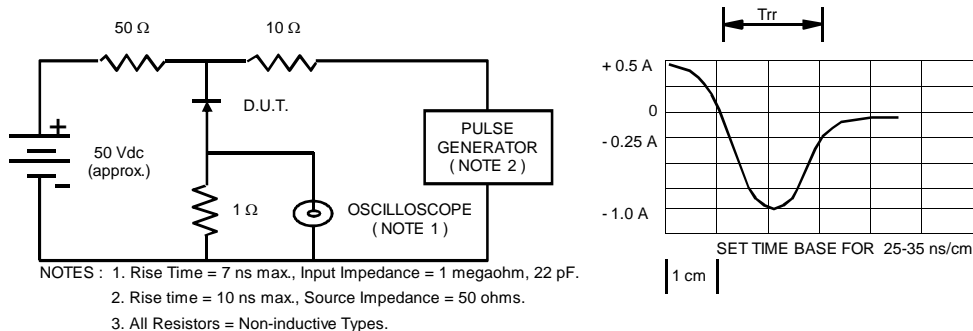


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

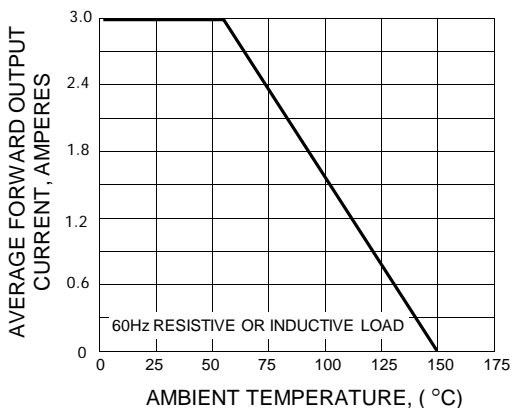


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

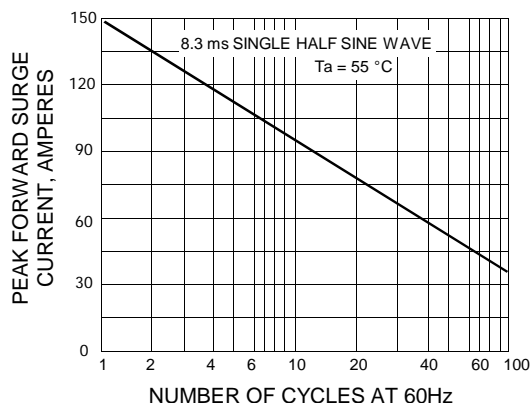


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

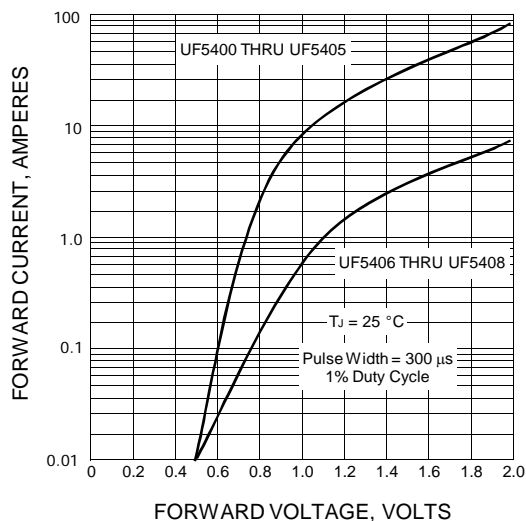


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

