LITE-ON SEMICONDUCTOR

UF3001 thru UF3004

ULTRA FAST RECTIFIERS

REVERSE VOLTAGE **- 50** to **400** Volts
FORWARD CURRENT **- 3.0** Amperes

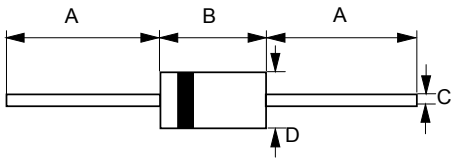
FEATURES

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.1 grams
- Mounting position : Any

DO-201AD



	DO-201AD	
Dim.	Min.	Max.
A	25.4	-
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	UF3001	UF3002	UF3003	UF3004	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	V
Maximum Average Forward Rectified Current @T_A=55℃	$I_{(AV)}$	3.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I_{FSM}	150				A
Maximum forward Voltage at 3.0A DC	V_F	1.0			1.3	V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	5 100				uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50				ns
Typical Junction Capacitance (Note 2)	C_J	75				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	20				℃/W
Operating Temperature Range	T_J	-55 to +125				℃
Storage Temperature Range	T_{STG}	-55 to +150				℃

NOTES : 1.Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Thermal Resistance Junction to Ambient.

REV. 4, Sep-2010, KDCF02

RATING AND CHARACTERISTIC CURVES
UF3001 thru UF3004

FIG.1 - FORWARD CURRENT DERATING CURVE

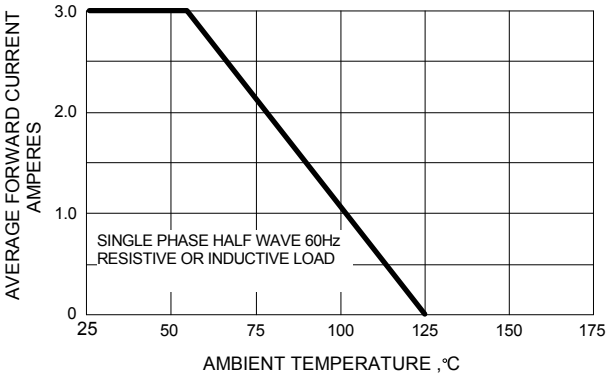


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

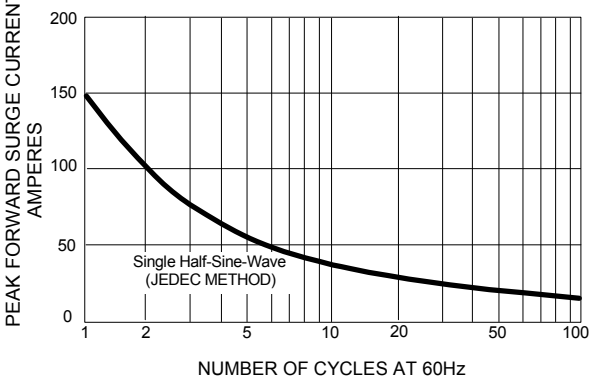


FIG.3 - TYPICAL JUNCTION CAPACITANCE

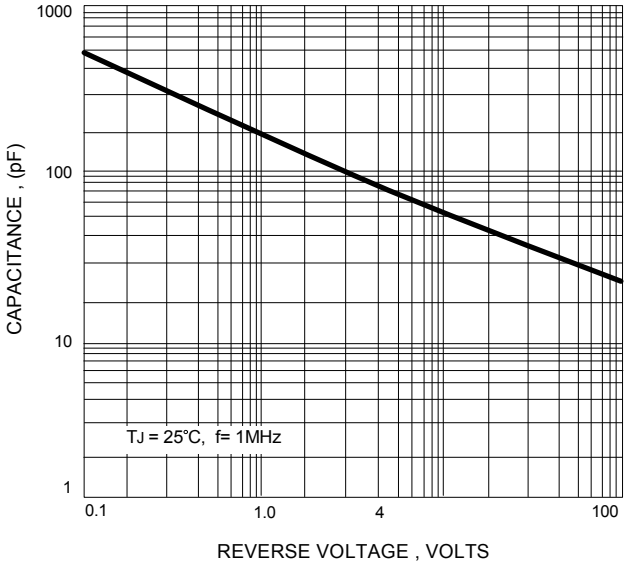
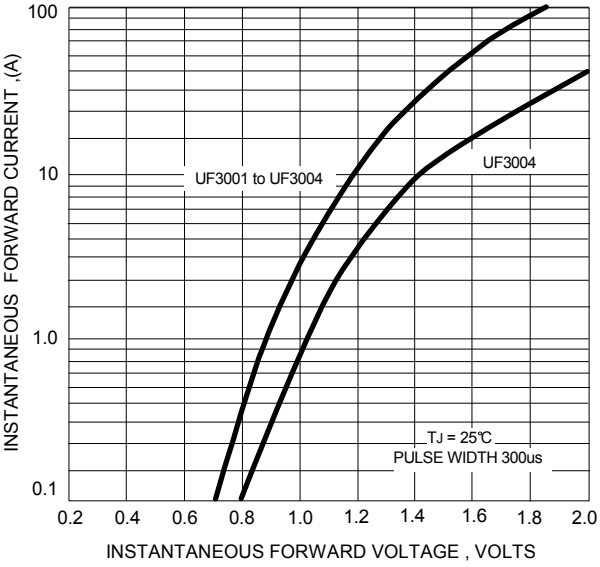


FIG.4 - TYPICAL FORWARD CHARACTERISTICS



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