

ULTRA FAST RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **1.0** Ampere

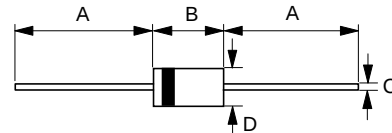
FEATURES

- 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-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

DO-41



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.71 $\varnothing$	0.86 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	UF1001	UF1002	UF1003	UF1004	UF1005	UF1006	UF1007	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=55°C	I(AV)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	IFSM	30							A
Maximum forward Voltage at 1.0A DC	VF	1.0			1.3	1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR	5 100							uA
Maximum Reverse Recovery Time (Note 1)	TRR	50				75			ns
Typical Junction Capacitance (Note 2)	CJ	20				10			pF
Typical Thermal Resistance (Note 3)	RθJA	25							°C/W
Operating Temperature Range	TJ	-55 to +125							°C
Storage Temperature Range	TSTG	-55 to +150							°C

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. 2, 01-Dec-2000, KDCC02

FIG.1 - FORWARD CURRENT DERATING CURVE

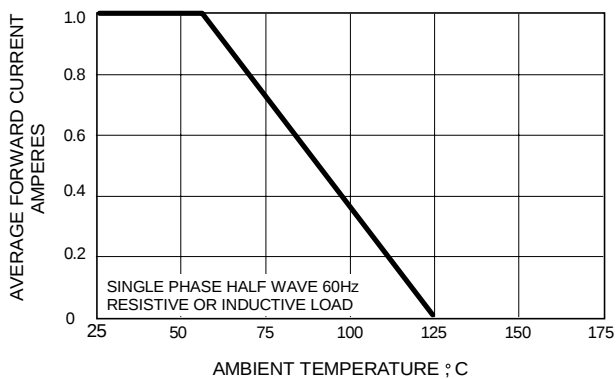


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

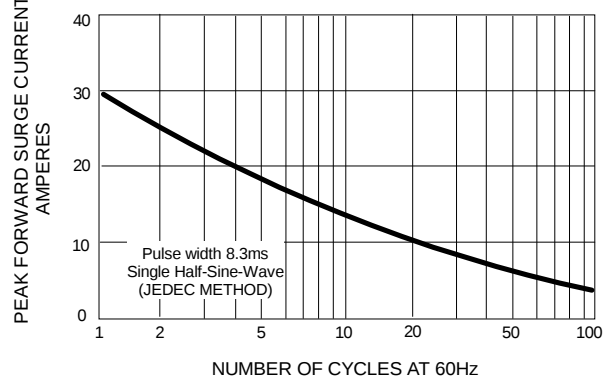


FIG.3 - TYPICAL JUNCTION CAPACITANCE

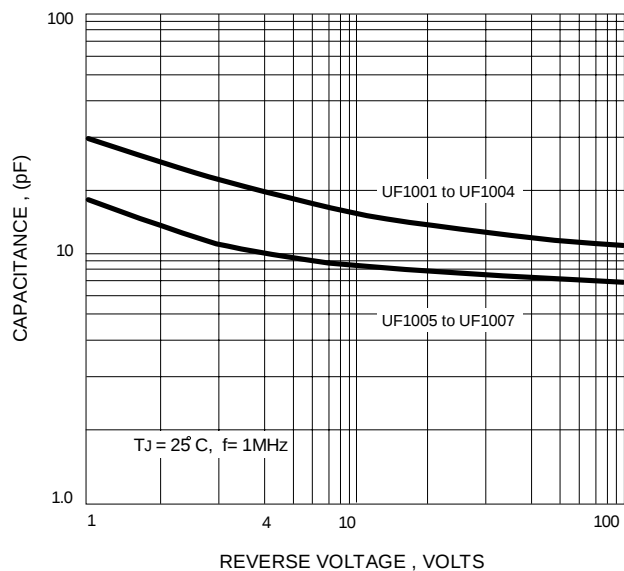


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

