

DATA SHEET

UF4001G~UF4006G

GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIERS

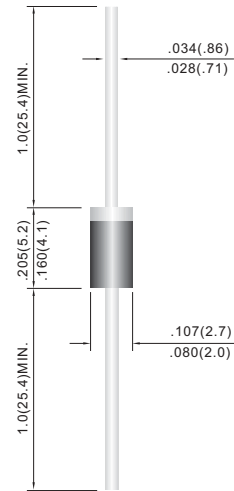
VOLTAGE	50 to 800 Volts	CURRENT	1.0 Amperes	DO-41	Unit: inch(mm)
----------------	------------------------	----------------	--------------------	--------------	----------------

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast recovery for high efficiency.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: Molded plastic, DO-41
 Terminals: Axial leads, solderable per MIL-STD-202G, Method 208
 Polarity: Band denotes cathode
 Mounting Position: Any
 Weight: 0.013 ounce, 0.3 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	UF4001G	UF4002G	UF4003G	UF4004G	UF4005G	UF4006G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I _{AV}	1.0						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30						A
Maximum Forward Voltage at 1.0A	V _F	1.0			1.3	1.5	1.7	V
Maximum DC Reverse Current TJ=25°C at Rated DC Blocking Voltage TJ=125°C	I _R	10 150						uA
Typical Junction capacitance (Note 1)	C _J	17						pF
Typical Thermal Resistance(Note 2)	RθJA	60						°C / W
Maximum Reverse Recovery Time (Note 3)	T _{RR}	50				75	100	ns
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 TO +150						°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted.
3. Test Condition: $T_A = T_J$ Per pulse test pulse width 300 μ s duty $\leq 2\%$

RATING AND CHARACTERISTIC CURVES

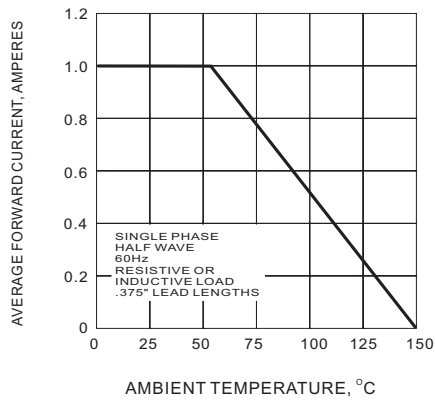


Fig.1 FORWARD CURRENT DERATING CURVE

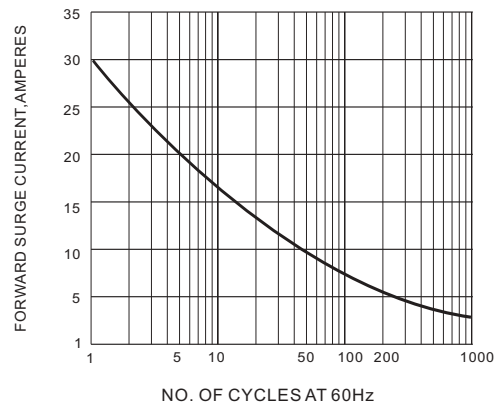


Fig.2 PEAK FORWARD SURGE CURRENT

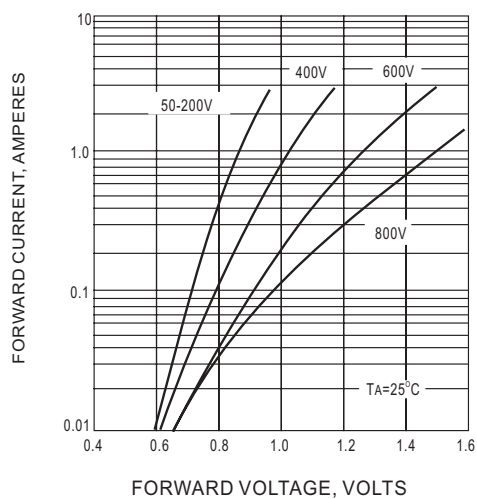


Fig.3 FORWARD CHARACTERISTICS

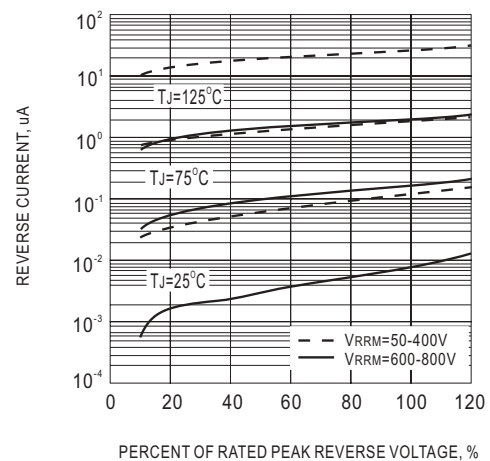


Fig.4 TYPICAL REVERSE CHARACTERISTICS

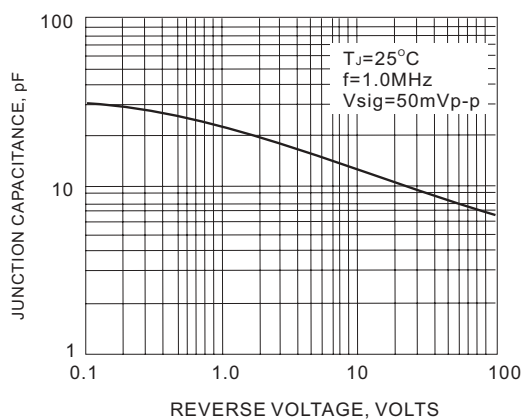


Fig.5 TYPICAL JUNCTION CAPACITANCE