

UF4007GR

1.0AMP. GLASS PASSIVATED ULTRA FAST RECTIFIERS

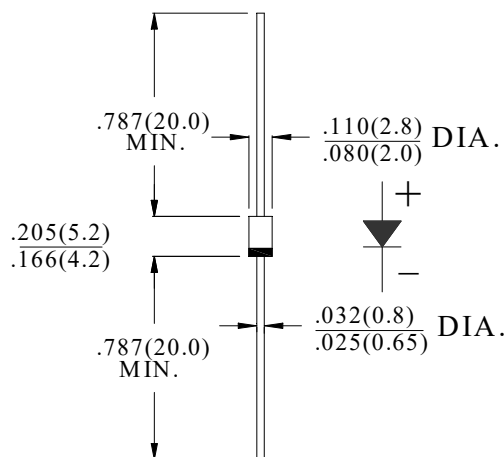
FEATURES

- Fast switching
- Low leakage
- Low forward voltage drop
- High current capability
- High surge capability
- High reliability
- High temperature soldering guaranteed:
260°C /10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: MIL-STD- 202E, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL 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%.

Type Number	SYM BOL	UF4007GR	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward rectified Current .375"(9.5mm) lead length	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rate load (JEDEC method)	I_{FSM}	30.0	A
Maximum forward Voltage at 1.0A DC	V_F	1.7	V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=125^{\circ}C$	I_R	5.0 100.0	μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	75	nS
Typical Junction Capacitance (Note 2)	C_J	8	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	75	$^{\circ}C/W$
	$R_{(JC)}$	28	
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$
Operation Junction Temperature	T_J	-55 to +150	$^{\circ}C$

Note:

1. Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
2. Measured at 1MHz and applied reverse voltage of 4.0 volts d.c.
3. Thermal Resistance from Junction to Ambient and Lead at 0.375"(9.5mm)lead length, vertical P.C.Board Mounted

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

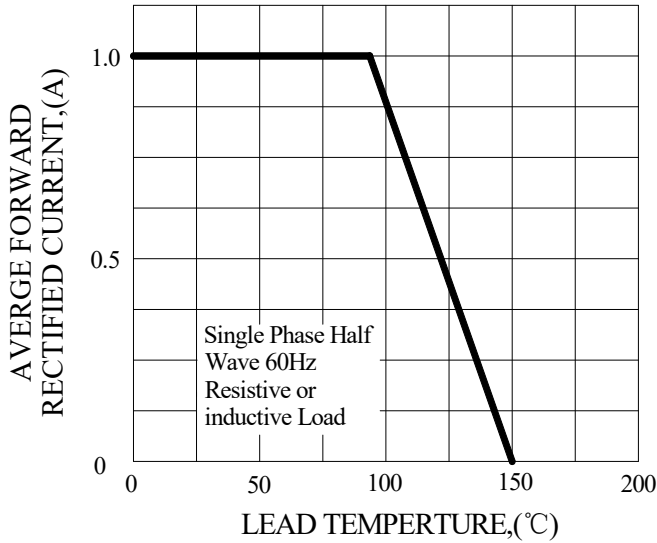


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

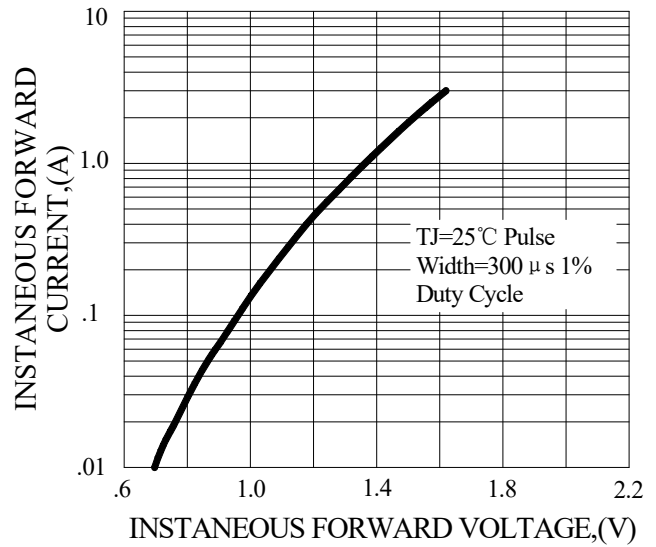


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

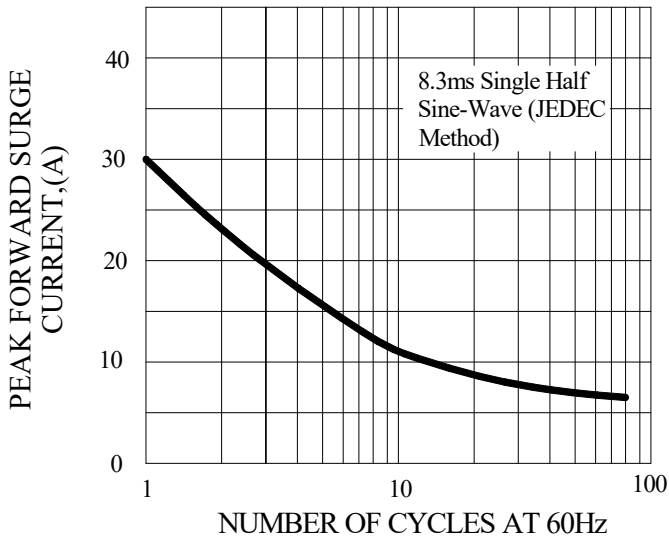


FIG.4-TYPICAL REVERSE CHARACTERISTICS

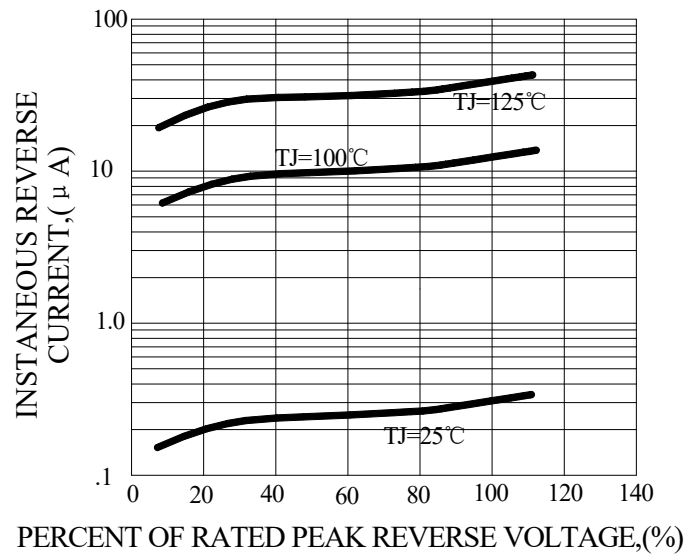
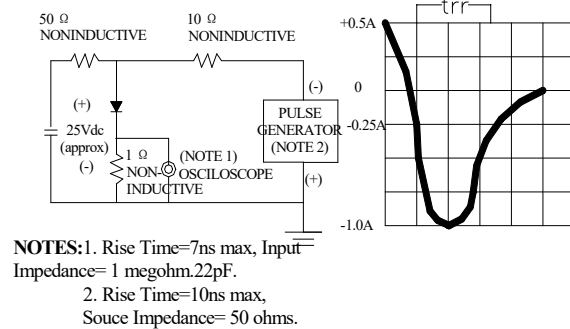
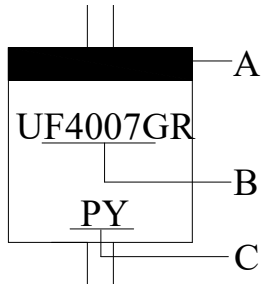


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



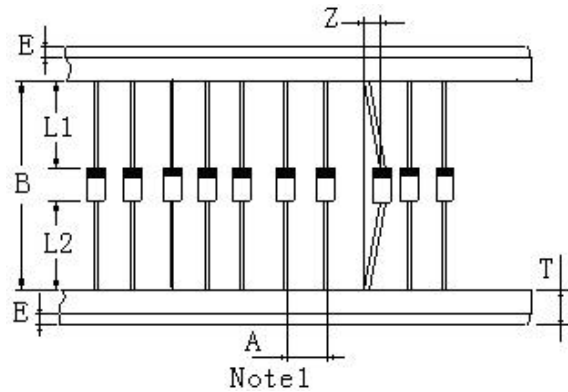
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name
C	Trademark

2、Packaging



ITEM	SYMBOL	SPECIFICATIONS	
		(mm)	(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max
Component	A	5.0±0.5	0.2±0.02
Inner tap	B	52.0~53.5	2.05~2.11

NOTE:

Each component lead shall be sandwiched between tapes for a minimum of 2.5mm (0.1inch)