

UF5404G

3.0AMPS. GLASS PASSIVATED ULTRA FAST RECTIFIER

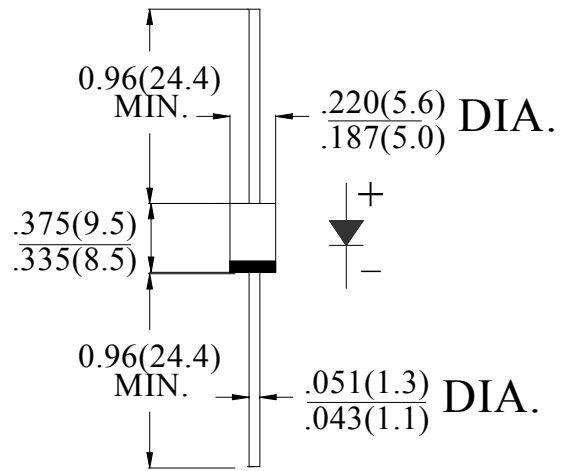
FEATURE

- . High current capability,
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . Superfast recovery time for high efficiency.
- . High temperature soldering guaranteed
260°C /1 0sec/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
- . Packaging: 12mm tape per EIA STD RS-481
- . Mounting position: Any

DO-27/DO-201AD



Dimensions in inches and (millimeters)

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%.

Type Number	SYM BOL	UF5404G	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward rectified Current .375"(9.5mm) lead length at Ta=55°C	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	90	A
Maximum Instantaneous forward Voltage at 3.0A DC	V_F	1.3	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I_R	5.0	μA
		100.0	
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50	nS
Typical Junction Capacitance (Note 2)	C_J	80	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	75	°C/W
Storage Temperature	T_{STG}	-55 to +150	°C
Operation Junction Temperature	T_J	-55 to +150	°C

Note:

1. Reverse Recovery test Condition: If=0.5A, IR=1.0A, IRR=0.25A;
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. P.C.B.Mounted on 0.2×0.2"(5.0×5.0mm)[0.013mm thick] Copper Pad Area

RATING AND CHARACTERISTIC CURVES (UF5404G)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

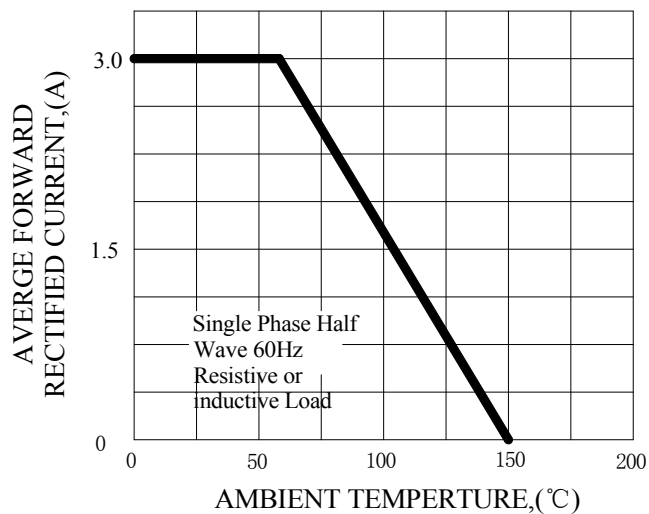


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

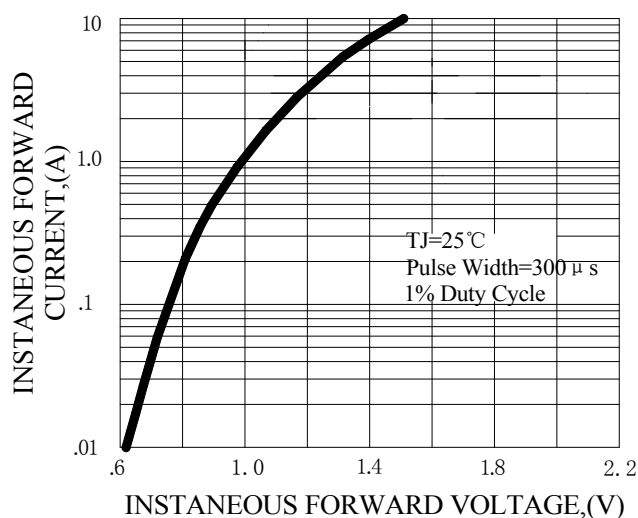


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

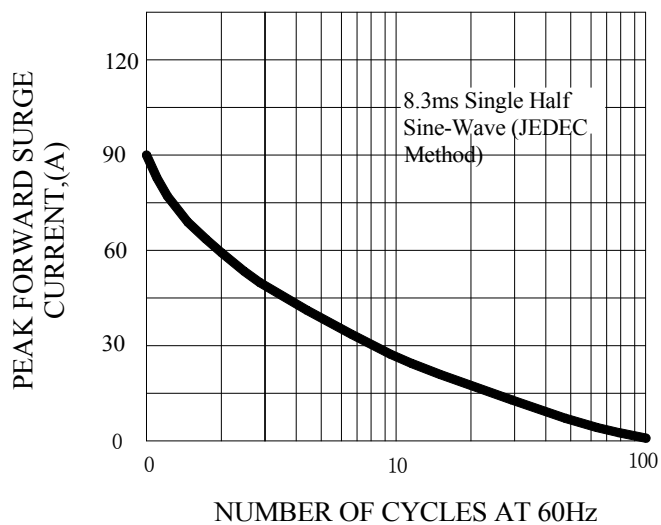


FIG.4-TYPICAL REVERSE CHARACTERISTICS

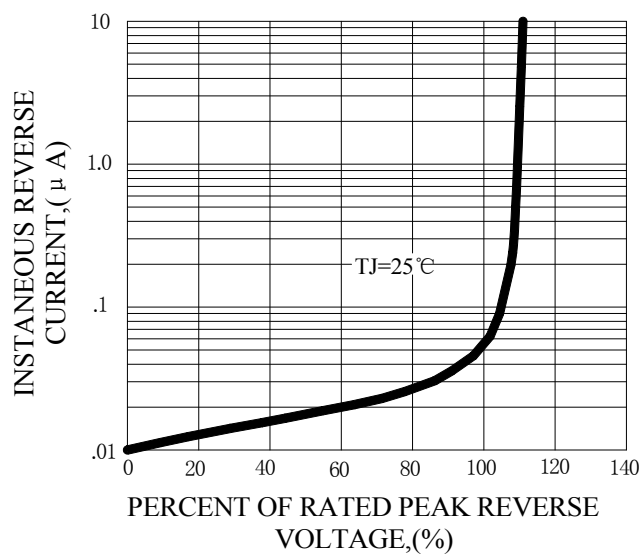
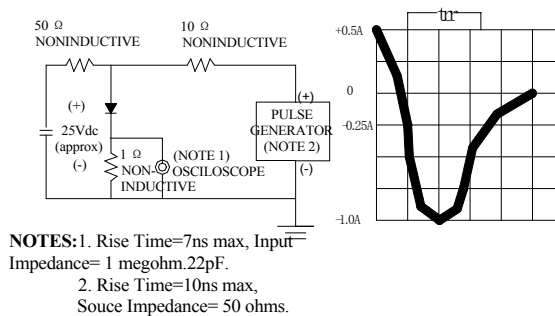
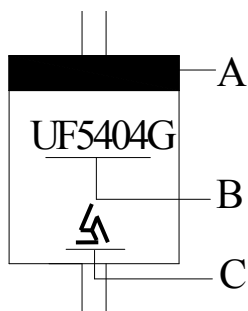


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



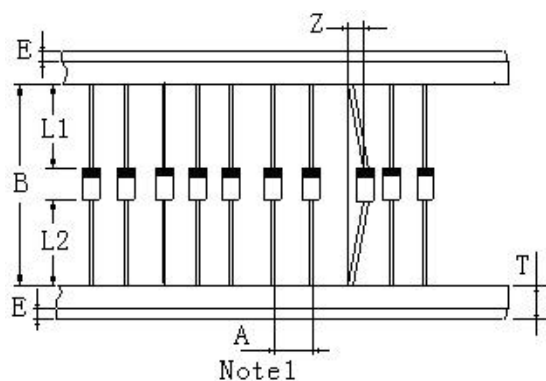
Marking and packaging illustration

1、Marking



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

2、Packaging



ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (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	10.0 ± 0.5	0.4 ± 0.02
Inner tap	B	52.0~53.5	2.06~2.11
NOTE: Each component lead shall be sandwiched between tapes for a minimum of 2.5mm (0.1inch)			