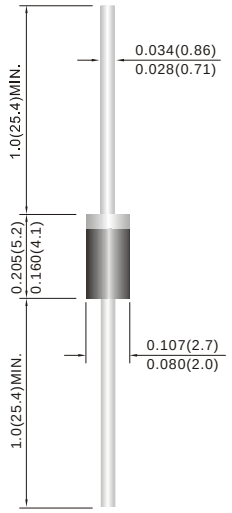
PANJIT SEMI CONDUCTOR

UF100G SERIES

GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIER

VOLTAGE 50 to 1000 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.
- Lead free in comply with EU RoHS 2002/95/EC directives.

MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: Axial leads, solderable per MIL-STD-750,Method 2026

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.0118 ounce, 0.336 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	UF100G	UF101G	UF102G	UF104G	UF106G	UF108G	UF1010G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	$I_{F(AV)}$	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	1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage TJ=25°C TJ=125°C	I_R	1.0 150							μA
Typical Junction Capacitance (Note 1)	C_J	17							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60							°C / W
Maximum Reverse Recovery Time (Note 3)	t_{rr}	50				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. Reverse Recovery Time I_F=.5A ,I_R=1A , I_{rr}=.25A

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RATING AND CHARACTERISTIC CURVES

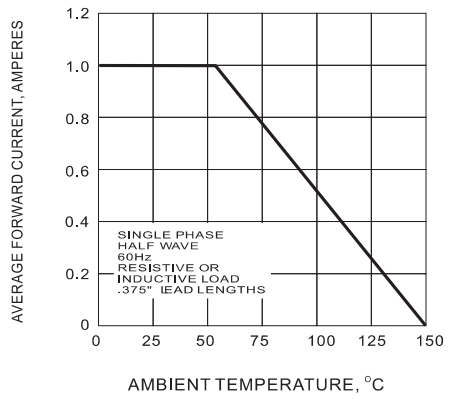

Fig.1 FORWARD CURRENT DERATING CURVE

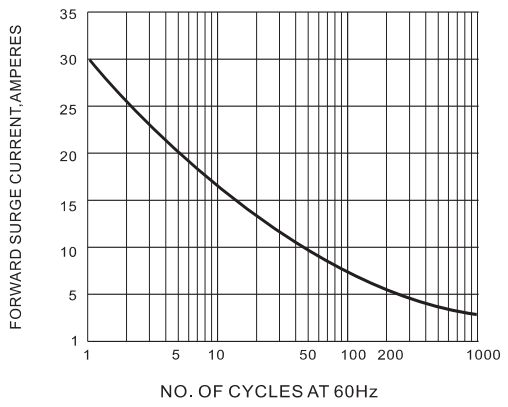

Fig.2 PEAK FORWARD SURGE CURRENT

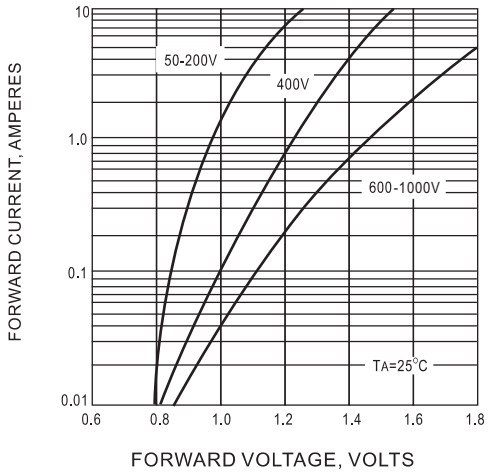

Fig.3 FORWARD CHARACTERISTICS

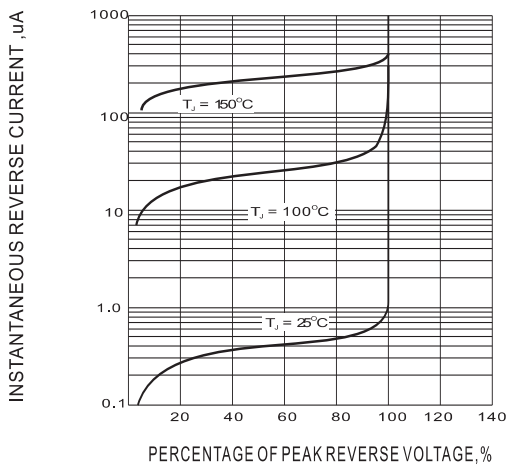

Fig.4-TYPICAL REVERSE CHARACTERISTIC

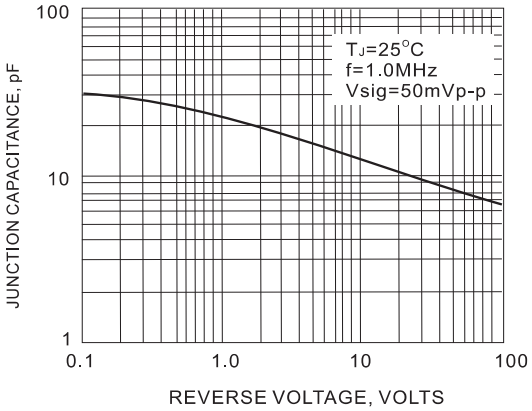

Fig.5 TYPICAL JUNCTION CAPACITANCE