

### **GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIER**

VOLTAGE 50 to 1000 Volt CURRENT 1.0 Amperes

#### **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 compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

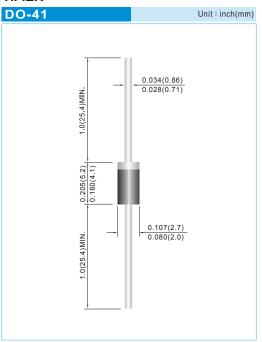
Case: Molded plastic, DO-41

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 <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	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					Α		
Peak Forward Surge Current : 8.3ms single half sine- wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	30					Α		
Maximum Forward Voltage at 1.0A	V <sub>F</sub>		1.0		1.3		1.7		٧
Maximum DC Reverse Current at Rated TJ=25°C DC Blocking Voltage TJ=125°C	I I	1.0 150					μА		
Typical Junction Capacitance (Note 1)	C	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 <sub>J</sub> ,T <sub>STG</sub>	-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



### RATING AND CHARACTERISTIC CURVES

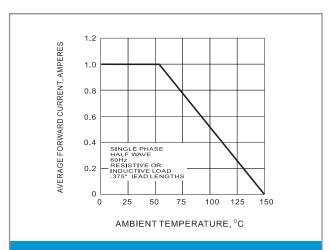


Fig.1 FORWARD CURRENT DERATING CURVE

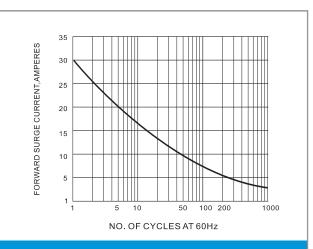


Fig.2 PEAK FORWARD SURGE CURRENT

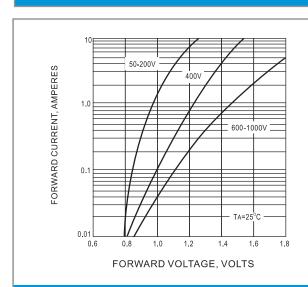


Fig.3 FORWARD CHARACTERISTICS

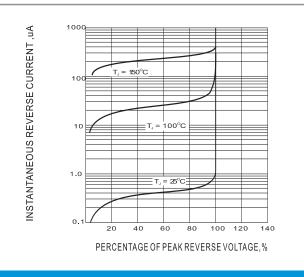


Fig.4-TYPICAL REVERSE CHARACTERISTIC

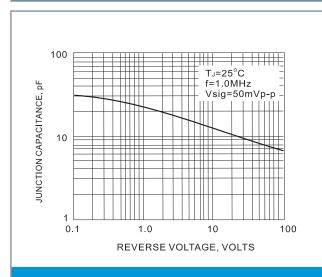


Fig.5 TYPICAL JUNCTION CAPACITANCE



# **Product and Packing Information**

Part No.	Package Type	Packing Type	Marking
UF100G	DO-41	5K pcs / Ammo	UF100G
UF101G	DO-41	5K pcs / Ammo	UF101G
UF102G	DO-41	5K pcs / Ammo	UF102G
UF104G	DO-41	5K pcs / Ammo	UF104G
UF106G	DO-41	5K pcs / Ammo	UF106G
UF108G	DO-41	5K pcs / Ammo	UF108G
UF1010G	DO-41	5K pcs / Ammo	UF1010G



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