

THERMAL PERFORMANCE			
PARAMETER	SYMBOL	ТҮР	UNIT
Junction-to-lead thermal resistance	R <sub>⊖JL</sub>	15	°C/W
Junction-to-ambient thermal resistance	R <sub>eja</sub>	60	°C/W

<b>ELECTRICAL SPECIFICATIONS</b> ( $T_A = 25^{\circ}C$ unless otherwise noted)						
PARAMETER		CONDITIONS	SYMBOL	ТҮР	MAX	UNIT
Forward voltage <sup>(1)</sup>	UF1A UF1B UF1D UF1G	_ I <sub>F</sub> = 1A, T <sub>J</sub> = 25°C	V <sub>F</sub>	-	1.0	V
	UF1J UF1K UF1M			-	1.7	V
Reverse current @ rated $V_R^{(2)}$		$T_J = 25^{\circ}C$	- I <sub>R</sub>	-	5	μA
		T <sub>J</sub> = 125°C		-	150	μA
Junction capacitance		1MHz, V <sub>R</sub> = 4.0V	CJ	17	-	pF
Reverse recovery time	UF1A UF1B UF1D UF1G	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A	t <sub>rr</sub>	-	50	ns
	UF1J UF1K UF1M	Irr = 0.23A		-	75	ns

#### Notes:

1. Pulse test with PW = 0.3ms

2. Pulse test with PW = 30ms

RDERING INFORMATION		
ORDERING CODE <sup>(1)(2)</sup>	PACKAGE	PACKING
UF1x	DO-204AL (DO-41)	5,000 / Tape & Reel
UF1x A0G	DO-204AL (DO-41)	3,000 / Ammo box
UF1xH	DO-204AL (DO-41)	5,000 / Tape & Reel
UF1xHA0G	DO-204AL (DO-41)	3,000 / Ammo box

Notes:

1. "x" defines voltage from 50V (UF1A) to 1000V (UF1M)

2. "H" means AEC-Q101 qualified



## **CHARACTERISTICS CURVES**

 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$ 

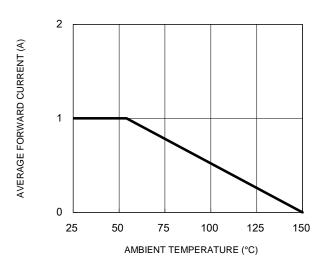
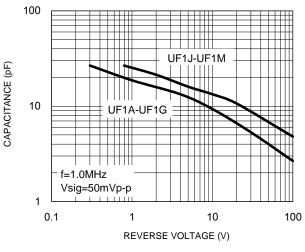


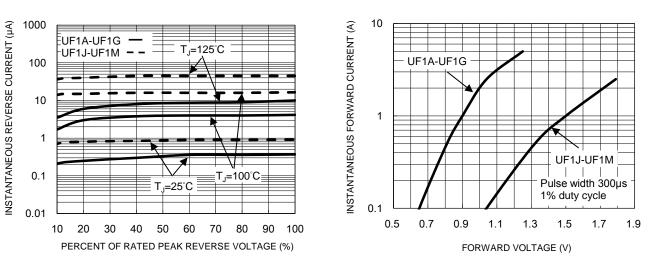
Fig.1 Forward Current Derating Curve

#### Fig.3 Typical Reverse Characteristics



**Fig.2 Typical Junction Capacitance** 

# **Fig.4 Typical Forward Characteristics**



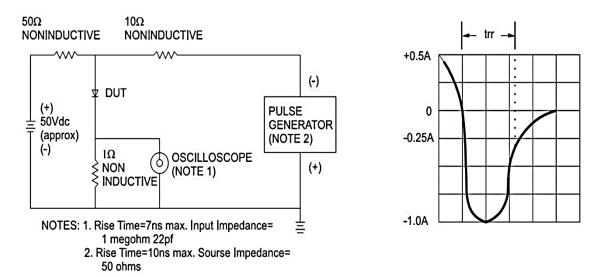
# 35 PEAK FORWARD SURGE CURRENT (A) 8.3ms single half sine wave 30 25 20 15 10 5 0 10 100 1 NUMBER OF CYCLES AT 60 Hz

#### Fig.5 Maximum Non-Repetitive Forward Surge Current



## **CHARACTERISTICS CURVES**

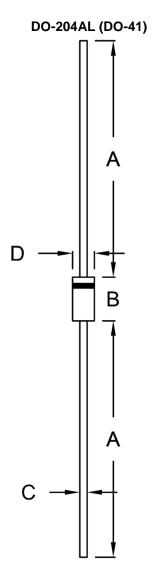
 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$ 



### Fig.6 Reverse Recovery Time Characteristic and Test Circuit Diagram



# **PACKAGE OUTLINE DIMENSIONS**



DIM.	Unit (mm)		Unit (inch)		
DIN.	Min.	Max.	Min.	Max.	
А	25.40	-	1.000	-	
В	4.20	5.20	0.165	0.205	
С	0.71	0.86	0.028	0.034	
D	2.00	2.70	0.079	0.106	

### **MARKING DIAGRAM**



P/N	= Marking Code
G	= Green Compound
YWW	= Date Code
F	= Factory Code



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