

- Ultrafast recovery time for high efficiency
- Low leakage current
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



MECHANICAL DATA

DO-204AL (DO-41)

Case: DO-204AL (DO-41)

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - green compound (halogen-free)

Base P/N with prefix "H" on packing code - AEC-Q101 qualified

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test,

with prefix "H" on packing code meet JESD 201 class 2 whisker test

Weight: 0.33g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800
Maximum average forward rectified current	I _{F(AV)}	1					
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30					
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F	1.0				1.7	
Maximum reverse current @ rated VR T _J =25 °C T _J =125 °C	I _R	5				150	
Maximum reverse recovery time (Note 2)	T _{rr}	50				75	
Typical junction capacitance (Note 3)	C _j	17					
Typical thermal resistance	R _{θJL} R _{θJA}					15 60	
Operating junction temperature range	T _J	- 55 to +150					
Storage temperature range	T _{STG}	- 55 to +150					

Note 1: Pulse test with PW=300µs, 1% duty cycle

Note 2: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

(Note 1)		R1		DO-41	5000 / 13" Paper
		B0		DO-41	1000 / Bul

Note 1: "x" defines voltage from 50V (UF4001) to 1000V (UF4007)

EXAMPLE

PREFERRED P/N	PART NO.	AEC-Q101 QUALIFIED	PACKING CODE	GREEN COMPOUND CODE	DES
UF4007 A0	UF4007		A0		
UF4007 A0G	UF4007		A0	G	Green
UF4007HA0	UF4007	H	A0		AEC-Q

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

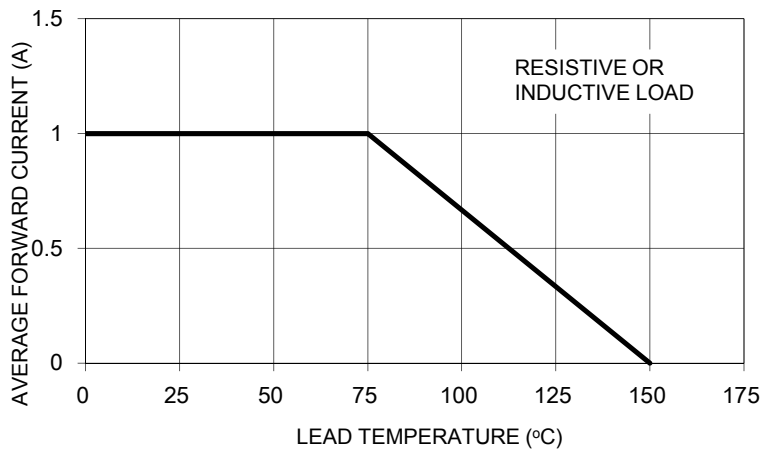


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

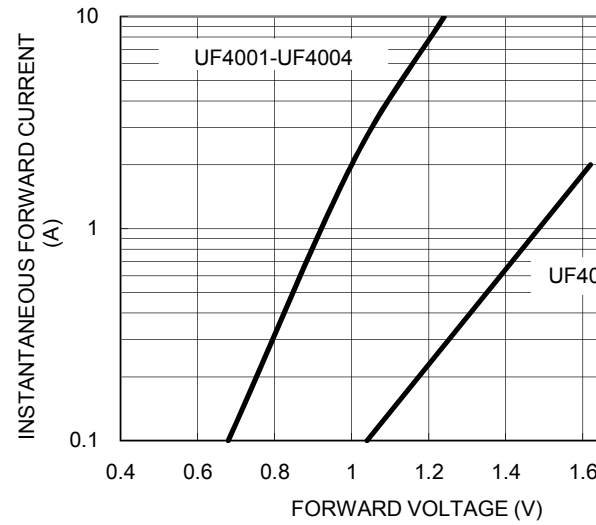


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

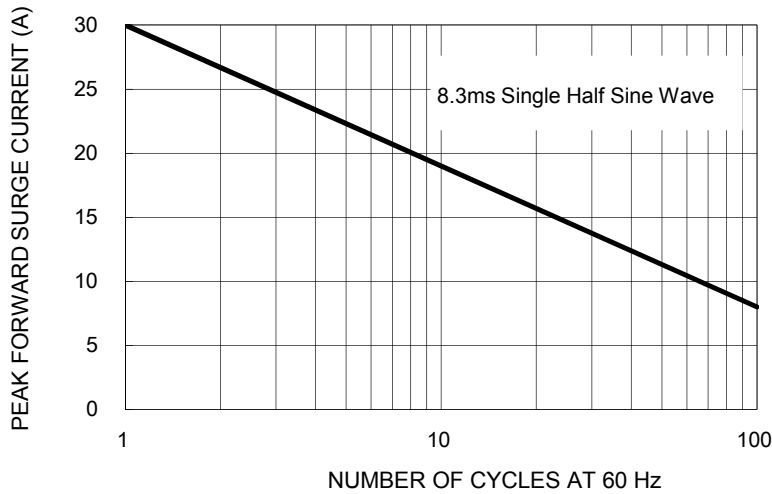
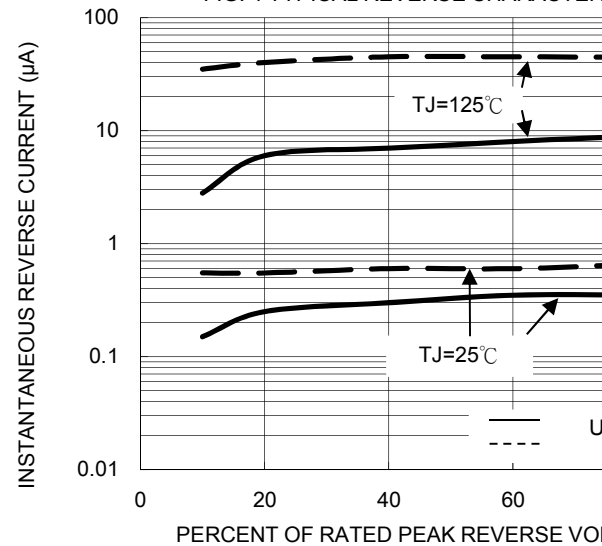
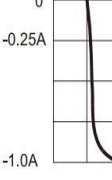
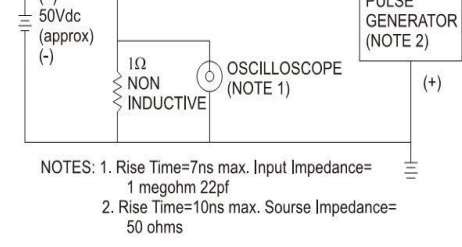
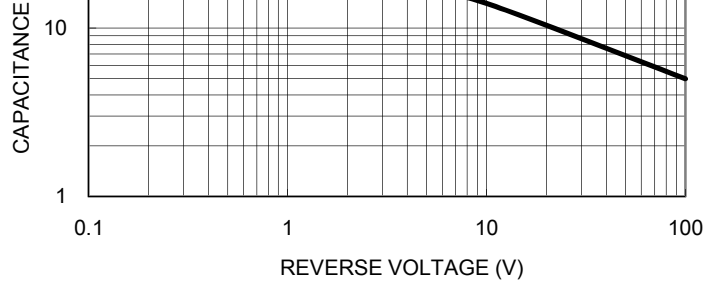
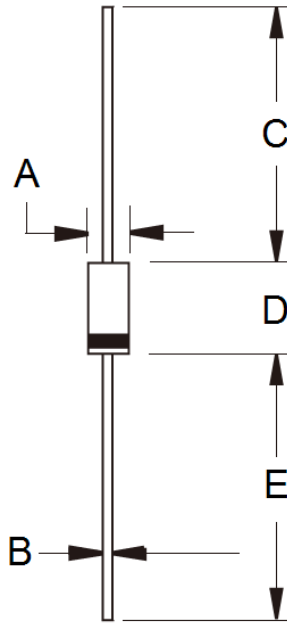


FIG. 4 TYPICAL REVERSE CHARACTERISTICS





PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.00	2.70	0.079	0.106
B	0.71	0.86	0.028	0.034
C	25.40	-	1.000	-
D	4.20	5.20	0.165	0.205
E	25.40	-	1.000	-

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

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