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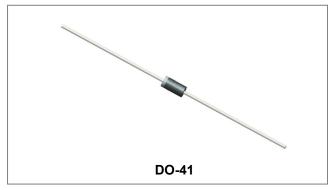


UF4001 THRU UF4007

Technical Data Data Sheet N0115, Rev. C



UF4001 THRU UF4007 ULTRA FAST RECITIFIERS



Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-O
- Ultra-fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds, 0.375" (9.5mm) lead length
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram

Cathode Anode

Applications

- Switching Power Supply
- Power Switching Circuits
- General Purpose

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

	SYMBOLS	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	UNIS
Maximum repetitive 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	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at T_A=55 $^\circ\!\!\!\!\!^\circ$	I _(AV)	1.0			А				
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0			А				
Maximum instantaneous forward voltage at 1.0A	VF		1.	0			1.70		V
Maximum DC reverse current T_A =25°C at rated DC blocking voltage T_A =100°C	I _R	5.0 50.0			μ Α				
Power dissipation value	P _{DV}	- 1.5			W				
Maximum reverse recovery time (Note 1)	trr		5	0			75		ns
Typical junction capacitance (Note 2)	CJ	15.0			pF				
Typical thermal resistance (Note 3)	Rcja	50.0			°C/W				
Approximate Weight	wt	0.35			g				
Operating junction and storage temperature range	T _J ,T _{STG}	-65 to +150			°C				

Note: 1. Reverse recovery condition IF=0.5A, IR=1.0A. Irr=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B mounted.

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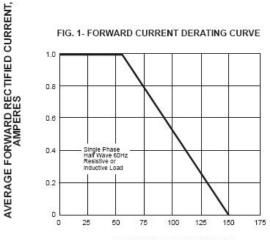


Technical Data Data Sheet N0115, Rev. C

UF4001 THRU **UF4007**

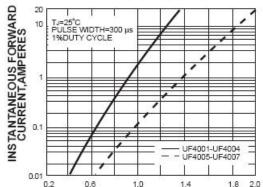


Ratings and Characteristics Curves

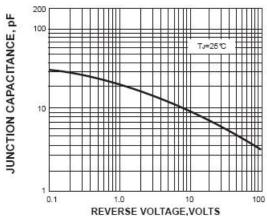


AMBIENT TEMPERATURE, °C

FIG. 3-TYPICAL INSTANTANEOUS FORWARD **CHARACTERISTICS**







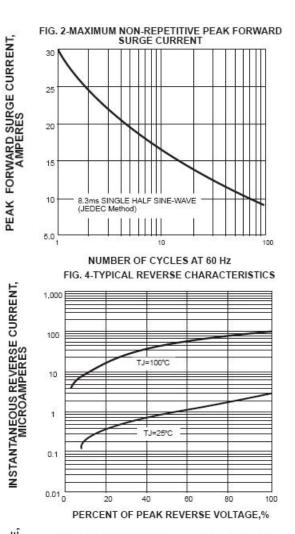
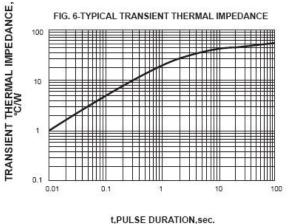


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

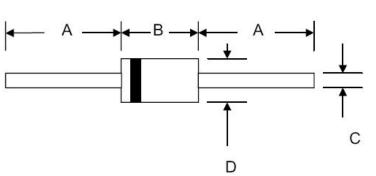


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Technical Data Data Sheet N0115, Rev. C

Mechanical Dimensions DO-41



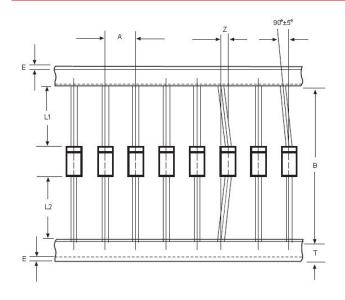
SYMDOL	Millin	neters	Inches			
SYMBOL	Min.	Max.	Min.	Max.		
А	25.4	-	1.000	-		
В	4.06	5.21	0.160	0.205		
С	0.71	0.864	0.028	0.034		
D	2.00	2.72	0.079	0.107		

Ordering Information

Device	Package	Shipping
UF4001 THRU UF4007	DO-41 (Pb-Free)	5000pcs /reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Carrier Tape Specification DO-41



SYMBOL	Millimeters			
	Min.	Max.		
A	4.50	5.50		
В	50.9	53.9		
Z	-	1.20		
Т	5.60	6.40		
E	-	0.80		
IL1-L2I	_	1.0		

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Marking Diagram



UF4001 = Part Name







Technical Data Data Sheet N0115, Rev. C





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