



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

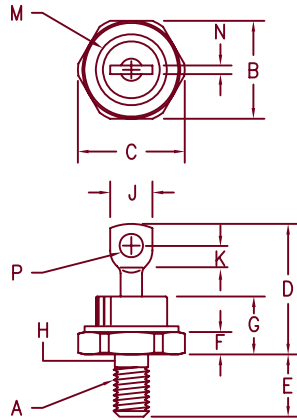
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Ultra Fast Recovery Rectifiers UFR70, 71 & 72



Notes:

- 1/4-28
- Full threads within 2 1/2 threads
- For Reverse Polarity add R to Part Number
Standard Polarity: Stud is Cathode
Reverse Polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1
B	.669	.688	16.99	17.48	
C	---	.793	---	20.14	
D	.750	1.00	19.05	25.40	
E	.422	.453	10.72	11.51	
F	.115	.200	2.92	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	2
J	---	.375	---	9.53	
K	.156	---	3.97	---	
M	---	.667	---	16.94	Dia
N	---	.080	---	2.03	
P	.140	.175	3.56	4.45	Dia

D0203AB (D05)

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Peak Reverse Voltage
UFR7010*	30HFU-100*	100V	100V
UFR7015*	60HFU-100*	150V	150V
UFR7020*	30HFU-200*	200V	200V
UFR7130*	60HFU-200*	300V	300V
UFR7140*	30HFU-300*	400V	400V
UFR7150*	60HFU-300*	500V	500V
UFR7250*	30HFU-400*	600V	600V
UFR7260*	60HFU-400*	700V	700V
UFR7270*	30HFU-500*	800V	800V
UFR7280*	60HFU-500*		
	30HFU-600*		
	60HFU-600*		

*Add Suffix R For Reverse Polarity

- Ultra Fast Recovery Rectifier
- 175°C Junction Temperature
- V_{RRM} 100 to 800V
- High Reliability
- 70 Amps current rating
- t_{RR} 50 to 75 nsec maximum

Electrical Characteristics

	UFR70	UFR71	UFR72	
Average forward current	$I_F(AV)$ 70A	70A	70A	Square wave, $R_{\theta JC} = 0.8^\circ C/W$
Case Temperature	T_C 125°C	110°C	105°C	
Maximum surge current	I_{FSM} 1000A	800A	700A	8.3 ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	V_{FM} .975V	1.25V	1.35V	$I_{FM} = 70A$; $T_J = 25^\circ C$ *
Max reverse recovery time	t_{RR} 50 ns	60ns	75 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	I_{RM} —	3.0 mA	—	V_{RRM} , $T_J = 125^\circ C$
Max peak reverse current	I_{RM} —	25 μA	—	V_{RRM} , $T_J = 25^\circ C$
Typical Junction Capacitance	C_J 300 pF	150 pF	150 pF	$V_R = 10V$, $f = 1MHz$, $T_J = 25^\circ C$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	-65°C to 175°C
Operating junction temp range	T_J	-65°C to 175°C
Max thermal resistance	$R_{\theta JC}$	0.8°C/W Junction to case
Typical thermal resistance	$R_{\theta CS}$	0.2°C/W Case to sink
Mounting torque		25-30 inch pounds
Weight		.54 ounces (15.3 grams) typical



6 Lake Street
Lawrence, MA 01841
PH: (978) 620-2600
FAX: (978) 689-0803
www.microsemi.com

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UFR70

Figure 1
Typical Forward Characteristics

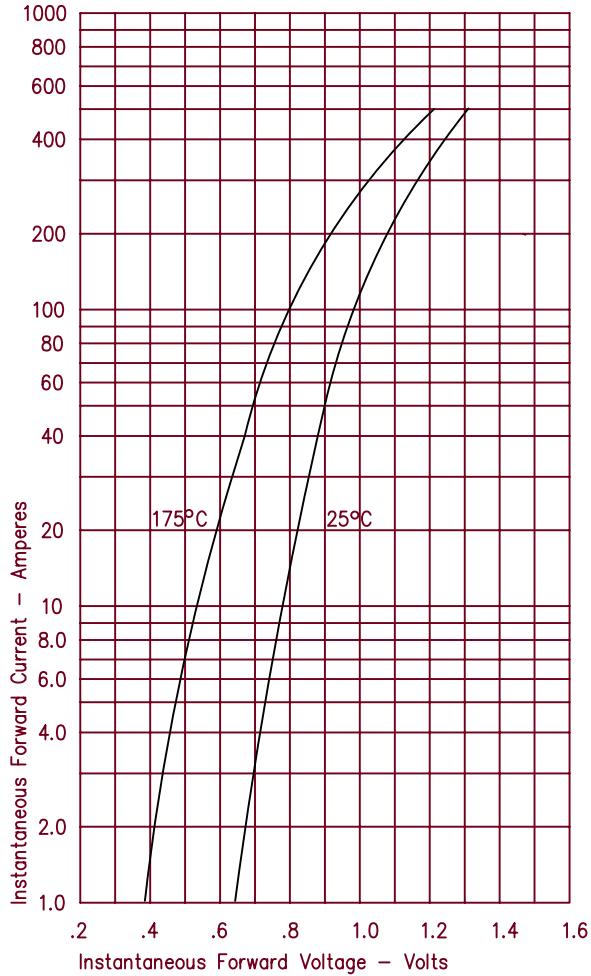


Figure 3
Typical Junction Capacitance

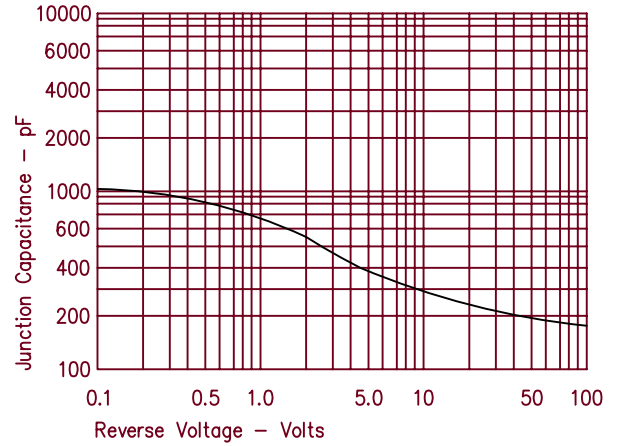


Figure 4
Forward Current Derating

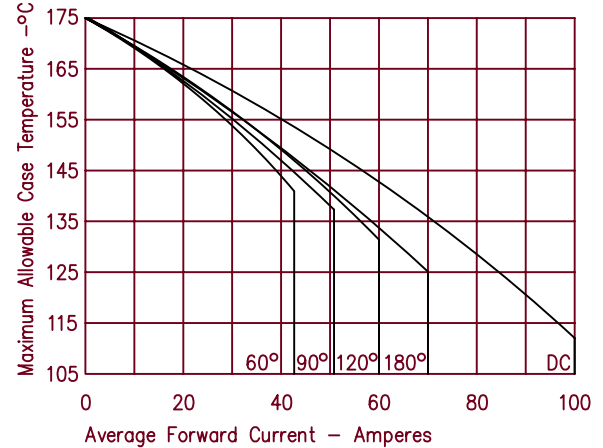


Figure 2
Typical Reverse Characteristics

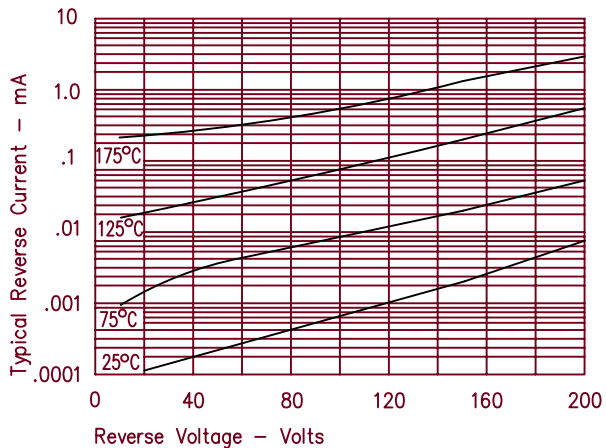
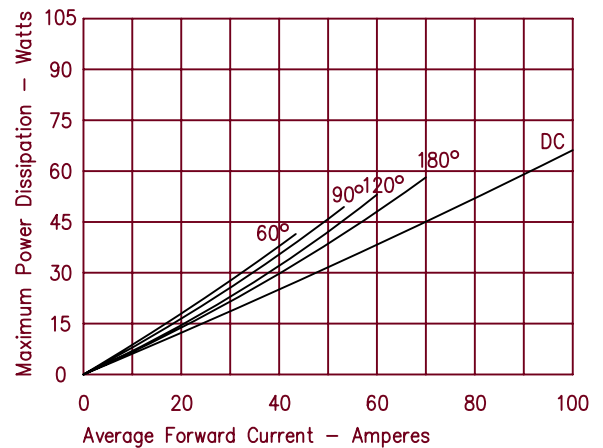


Figure 5
Maximum Forward Power Dissipation



UFR71

Figure 1
Typical Forward Characteristics

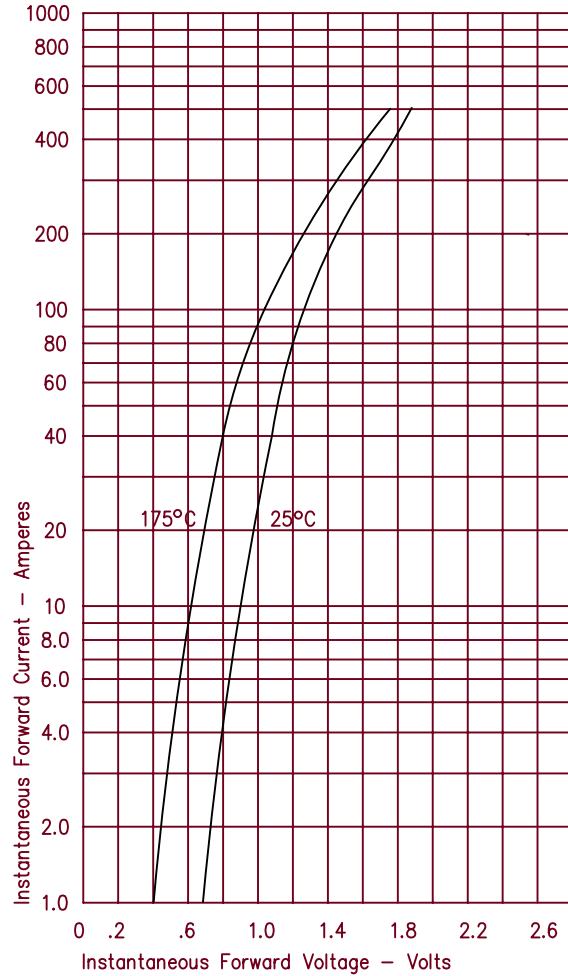


Figure 2
Typical Reverse Characteristics

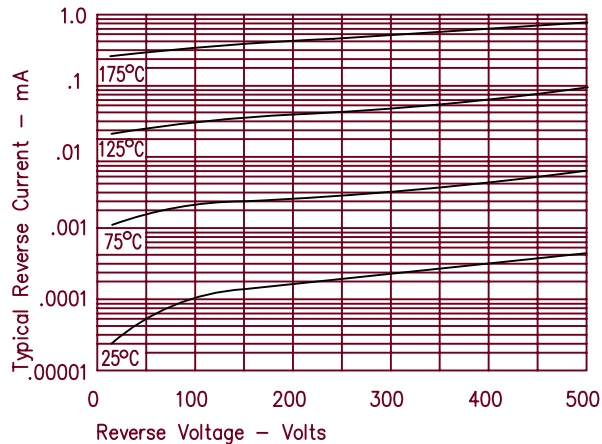


Figure 3
Typical Junction Capacitance

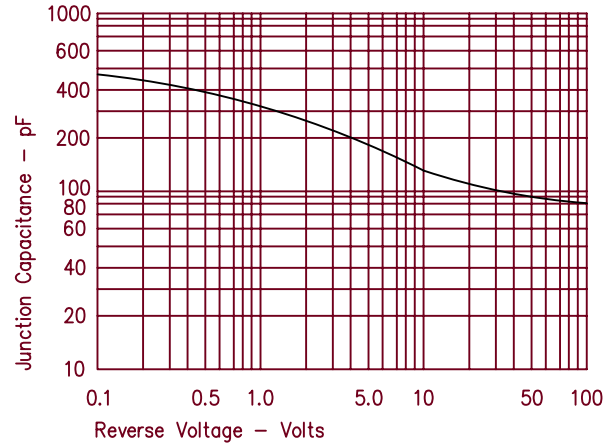


Figure 4
Forward Current Derating

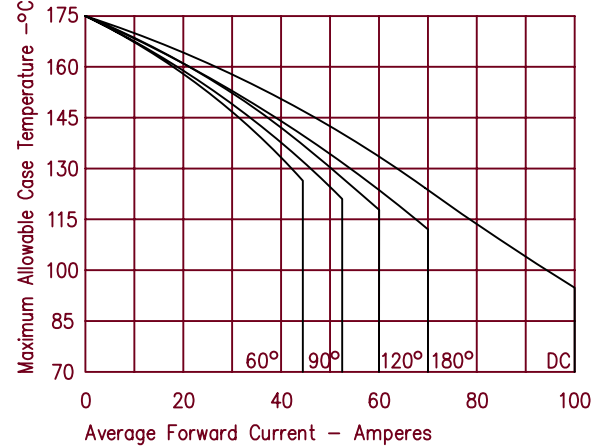
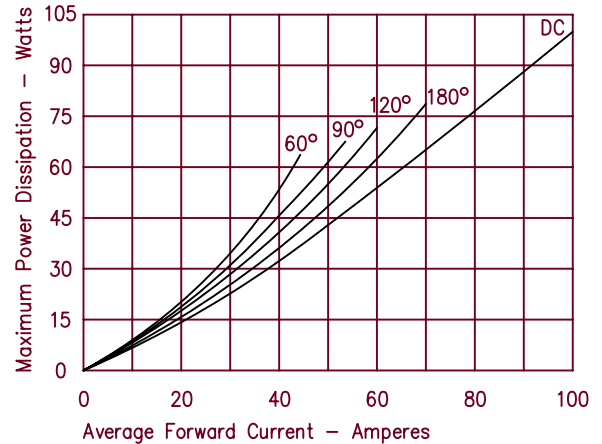


Figure 5
Maximum Forward Power Dissipation



UFR72

Figure 1
Typical Forward Characteristics

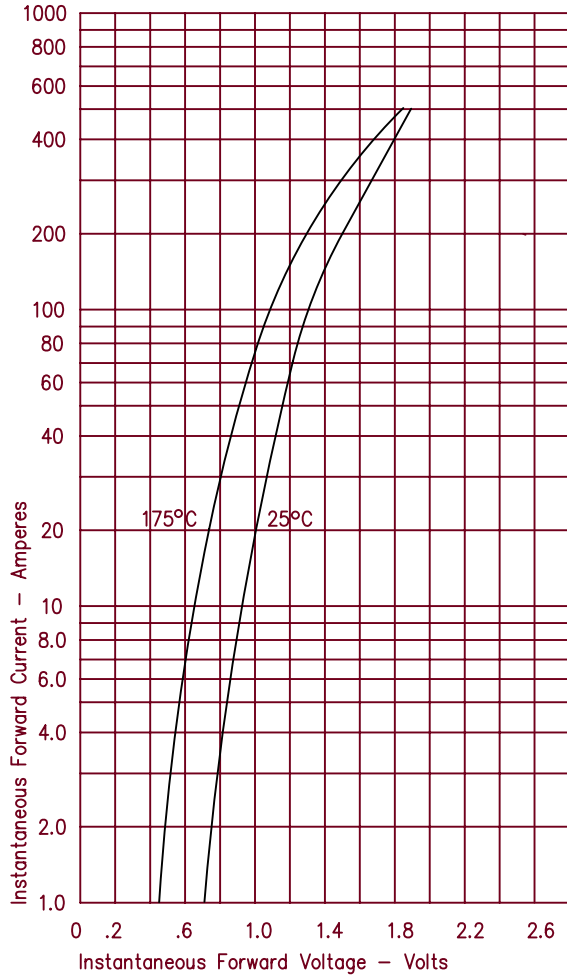


Figure 2
Typical Reverse Characteristics

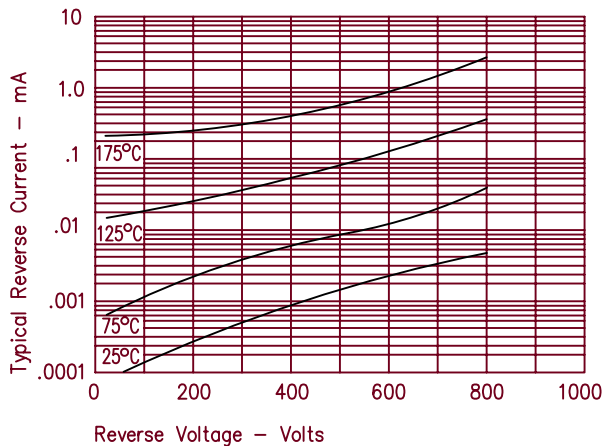


Figure 3
Typical Junction Capacitance

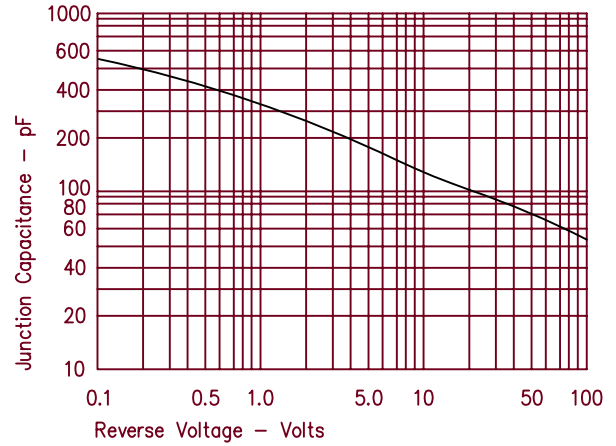


Figure 4
Forward Current Derating

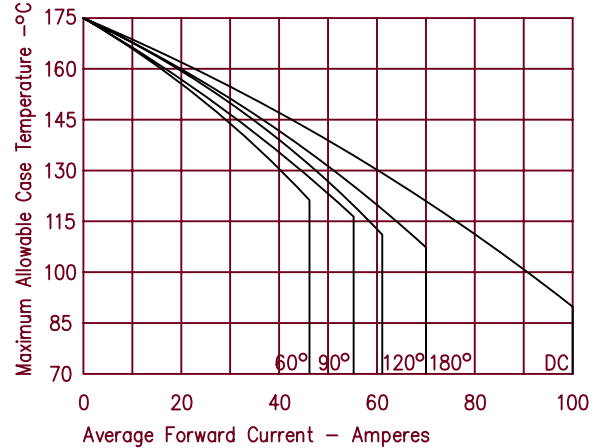


Figure 5
Maximum Forward Power Dissipation

