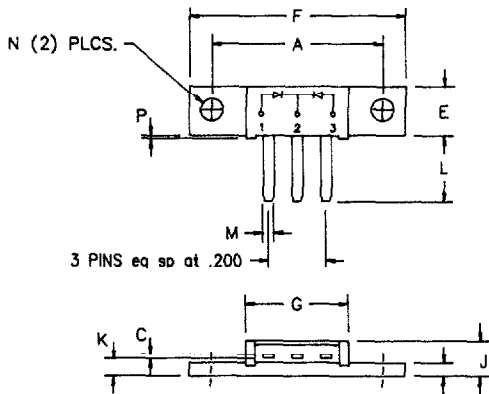


Ultrafast Recovery Modules UFT70, 71 & 72



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	1.180	1.195	29.97	30.35	
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	1.490	1.510	37.85	38.35	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.115	.135	2.92	3.43	
L	.460	.480	11.68	12.19	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	Dia.
P	.015	.025	0.38	0.64	



Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UFT7005*	50V	50V
UFT7010*	100V	100V
UFT7015*	150V	150V
UFT7020*	200V	200V
UFT7120*	300V	300V
UFT7130*	400V	400V
UFT7140*	500V	500V
UFT7250*	600V	600V
UFT7150*	700V	700V
UFT7260*	800V	800V
UFT7270*		
UFT7280*		

*Add the Suffix A for Common Anode or D for Doubler

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 50 to 800 Volts
- Unique surface mount package
- 2 X 35 Amp current rating

Electrical Characteristics				
	UFT70	UFT71	UFT72	
Average forward current per pkg	IF(AV) 70A	70A	70A	Square Wave
Average forward current per leg	IF(AV) 35A	35A	35A	Square Wave
Case Temperature	TC 148°C	142°C	138°C	RθJC = 1.0°C/W
Maximum surge current per leg	IFSM 700A	600A	500A	8.3ms, half sine, T _J = 175°C
Max peak forward voltage per leg	VFM .95V	1.20V	1.35V	IFM = 35A; T _J = 25°C*
Max reverse recovery time per leg	t _{rr} 50ns	60ns	75ns	1/2A, 1A, 1/4A, T _J = 25°C
Typical reverse recovery time per leg	t _{rr} 35ns	50ns	65ns	1/2A, 1A, 1/4A, T _J = 25°C
Max peak reverse current per leg	IRM	3.0mA		VRRM, T _J = 125°C
Max peak reverse current per leg	IRM	25μA		VRRM, T _J = 25°C
Typical Junction capacitance	C _J 300pF	120pF	115pF	VR = 10V, T _J = 25°C

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

Thermal and Mechanical Characteristics		
Storage temp range	T _{STG}	-40°C to 175°C
Operating junction temp range	T _J	-40°C to 175°C
Max thermal resistance per leg	RθJC	1.0°C/W Junction to case
per package	RθJC	0.5°C/W Junction to case
Typical thermal resistance per leg	RθJC	0.85°C/W Junction to case
Typical thermal resistance	RθCS	0.3°C/W Case to sink
Mounting torque		10 inch pounds maximum
Weight		0.3 ounce (8.4 grams) typical

Microsemi Corp.
Colorado

PH: 303-469-2161
FAX: 303-466-3775

UFT70

Figure 1
Typical Forward Characteristics - Per Leg

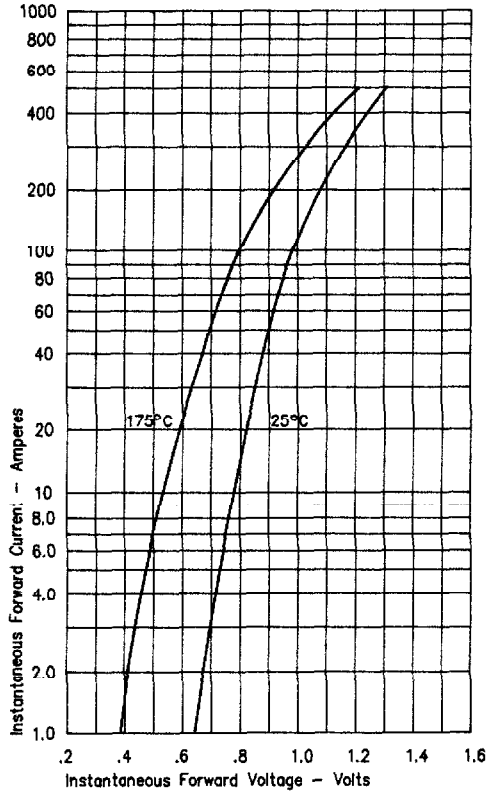


Figure 3
Typical Junction Capacitance - Per Leg

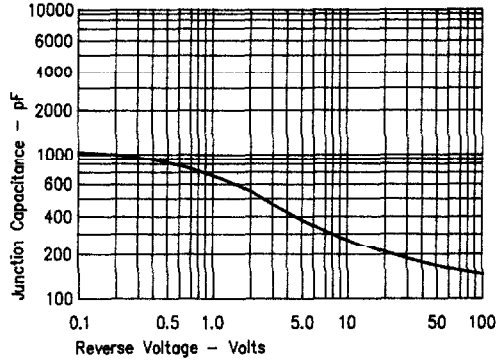


Figure 4
Forward Current Derating - Per Leg

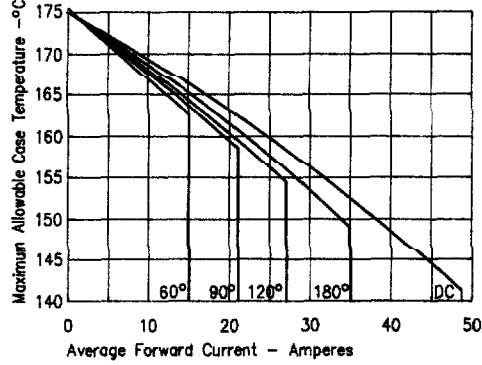


Figure 2
Typical Reverse Characteristics - Per Leg

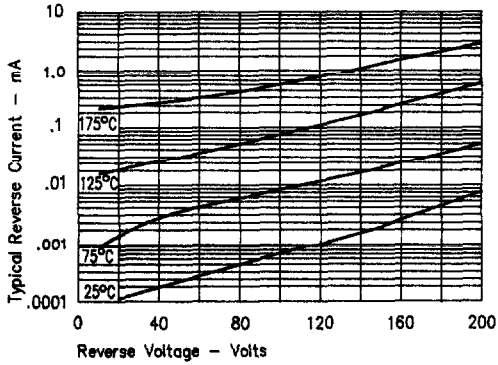
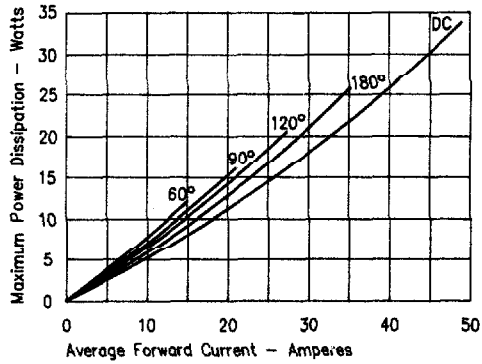


Figure 5
Maximum Forward Power Dissipation - Per Leg



UFT71

Figure 1
Typical Forward Characteristics - Per Leg

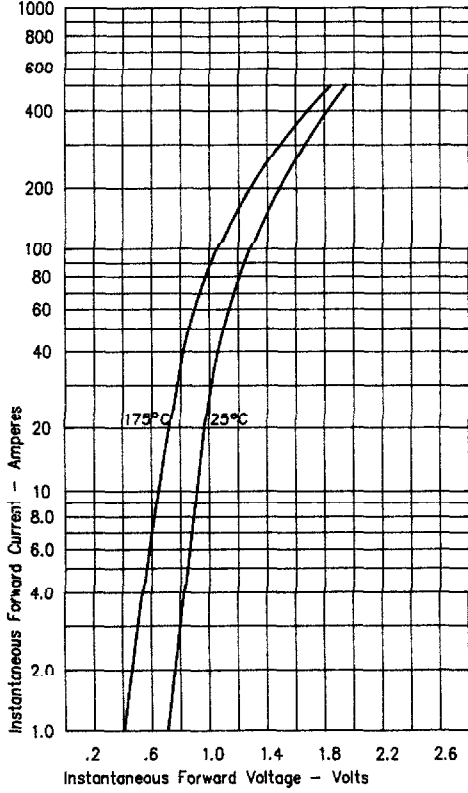
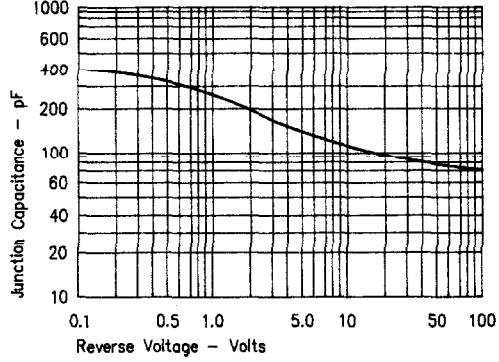


Figure 3
Typical Junction Capacitance - Per Leg



D

Figure 4
Forward Current Derating - Per Leg

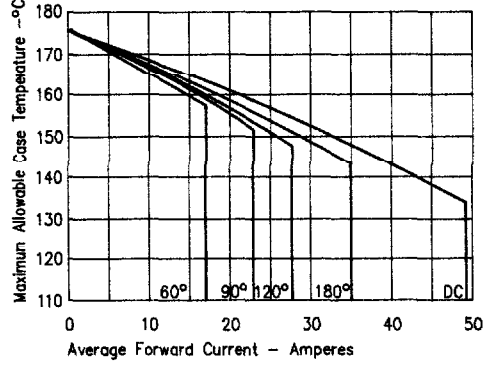


Figure 2
Typical Reverse Characteristic - Per Leg

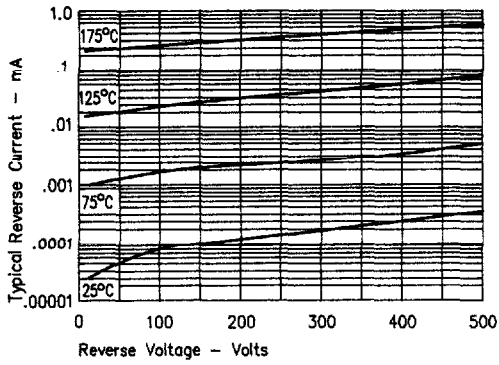
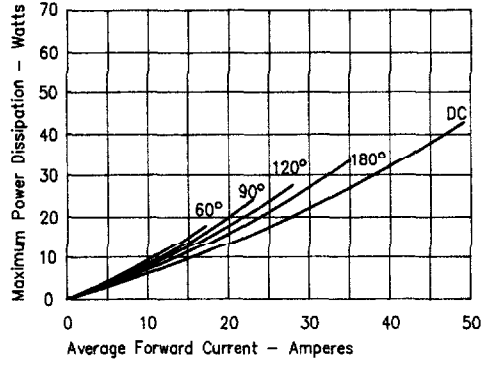


Figure 5
Maximum Forward Power Dissipation - Per Leg



UFT72

Figure 1
Typical Forward Characteristics - Per Leg

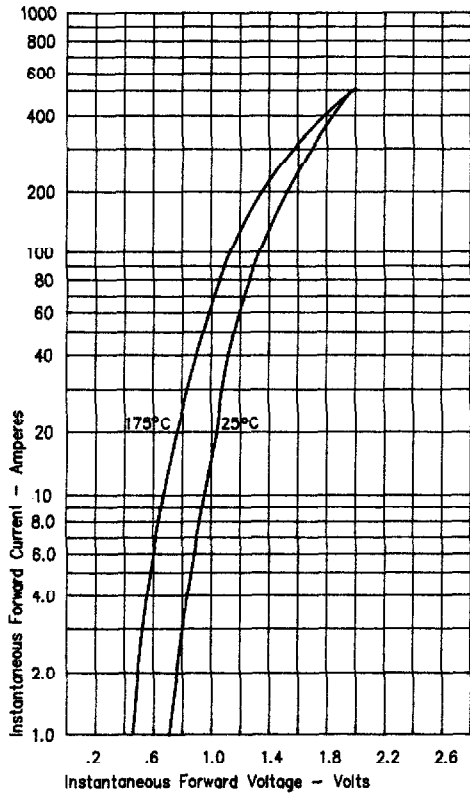


Figure 3
Typical Junction Capacitance - Per Leg

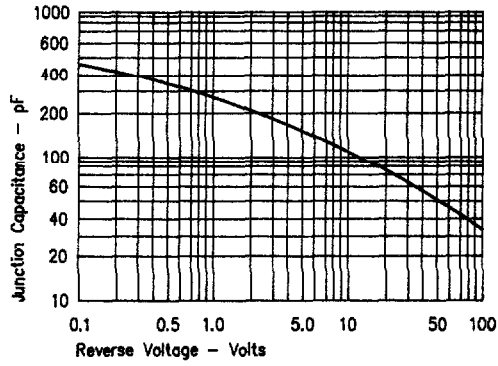


Figure 4
Forward Current Derating - Per Leg

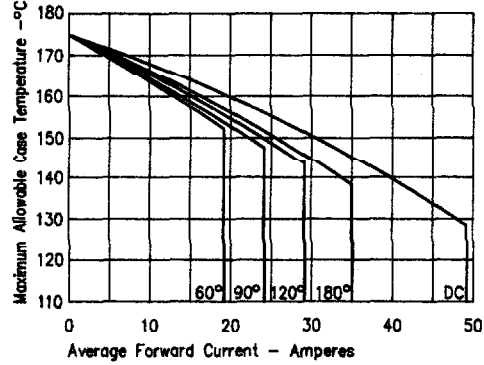


Figure 2
Typical Reverse Characteristics - Per Leg

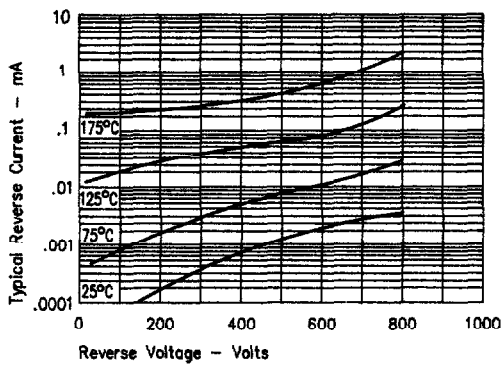


Figure 5
Maximum Forward Power Dissipation - Per Leg

