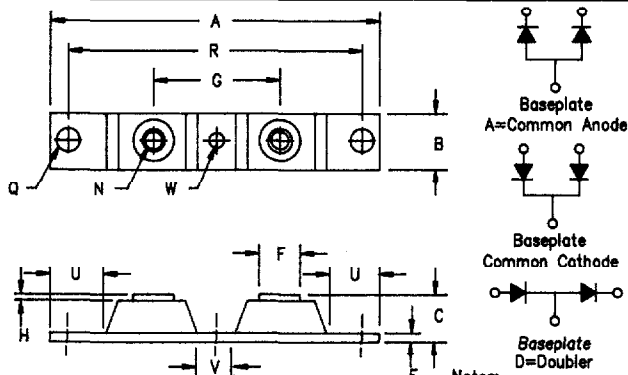


# Ultrafast Recovery Modules

## UFT 200, 201 & 202



Notes:  
Baseplate: Nickel plated copper; common cathode

Dim.	Inches		Millimeters		Notes
	Min.	Max.	Min.	Max.	
A	---	3.630	---	92.20	
B	0.700	0.800	17.78	20.32	
C	---	0.625	---	15.87	
E	0.120	0.130	3.05	3.30	
F	0.490	0.510	12.45	12.95	
G	1.375 BSC		34.92 BSC		
H	---	0.050	---	1.27	
N	---	---	---	---	1/4-28 Dia.
Q	0.280	0.310	6.86	7.11	
R	3.150 BSC		80.01 BSC		
U	0.600	---	15.24	---	
V	0.330	0.350	8.38	8.89	
W	0.170	0.190	4.32	4.82	
Y	46.10 BSC		1.815 BSC		



Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UFT20005*	50V	50V
UFT20010*	100V	100V
UFT20015*	150V	150V
UFT20020*UFT20120*	200V	200V
UFT20130*	300V	300V
UFT20140*	400V	400V
UFT20250*UFT20150*	500V	500V
UFT20260*	600V	600V
UFT20270*	700V	700V
UFT20280*	800V	800V

Add Suffix A for Common Anode, D for Doubler

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 50 to 800 Volts
- High surge capacity
- 2 X 100 Amp current rating

Electrical Characteristics				
	UFT200	UFT201	UFT202	
Average forward current per pkg	IF(AV) 200A	200A	200A	Square Wave
Average forward current per leg	IF(AV) 100A	100A	100A	Square Wave
Case Temperature	TC 135°C	120°C	115°C	RθJC = 0.5°C/W
Maximum surge current per leg	IFSM 1500A	1400A	1200A	8.3ms, half sine, TJ = 175°C
Max peak forward voltage per leg	VFM .975V	1.25V	1.35V	IFM = 100A; TJ = 25°C*
Max reverse recovery time per leg	t <sub>rr</sub> 50ns	70ns	90ns	1/2A, 1A, 1/4A, TJ = 25°C
Typical reverse recovery time per leg	t <sub>rr</sub> 40ns	55ns	75ns	1/2A, 1A, 1/4A, TJ = 25°C
Max reverse recovery time per leg	t <sub>rr</sub> 75ns	90ns	110ns	70A, 130A/us, TJ = 25°C
Max peak reverse current per leg	IRM 6.0mA			VRRM, TJ = 125°C
Max peak reverse current per leg	IRM 50μA			VRRM, TJ = 25°C
Typical Junction capacitance	C <sub>J</sub> 575pF	300pF	275pF	VR = 10V, TJ = 25°C

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

Thermal and Mechanical Characteristics		
Storage temp range	T <sub>STC</sub>	-40°C to 175°C
Operating junction temp range	T <sub>J</sub>	-40°C to 175°C
Max thermal resistance per leg	RθJC	0.5°C/W Junction to case
per package	RθJC	0.25°C/W Junction to case
Typical thermal resistance per leg	RθJC	0.4°C/W Junction to case
Typical thermal resistance	RθCS	0.08°C/W Case to sink
Terminal Torque		50 inch pounds maximum
Mounting base torque - (outside holes)		40 inch pounds maximum
Mounting base torque - (center hole)		10 inch pounds maximum
center bolt must be torqued first		
Weight		2.8 ounces (75 grams) typical

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

**Microsemi Corp.**  
**Colorado**

# UFT 200

Figure 1  
Typical Forward Characteristics - Per Leg

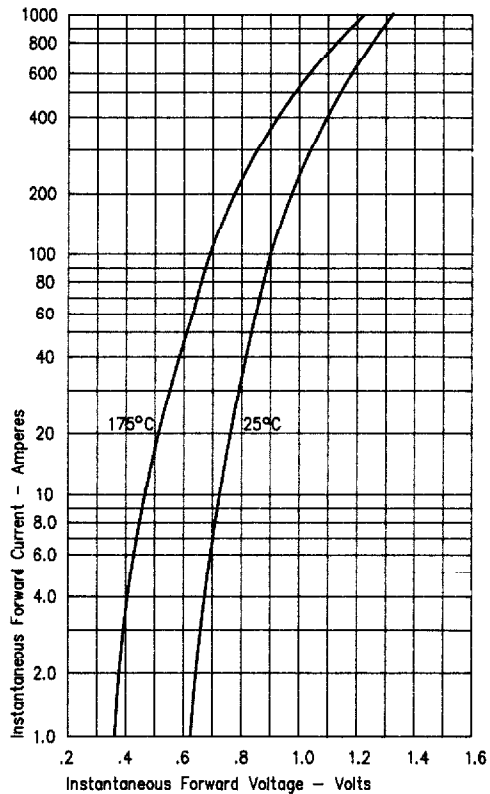


Figure 3  
Typical Junction Capacitance - Per Leg

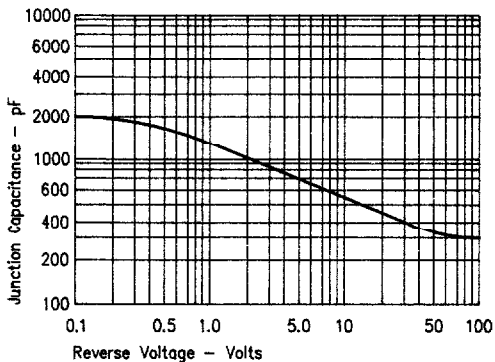


Figure 4  
Forward Current Derating - Per Leg

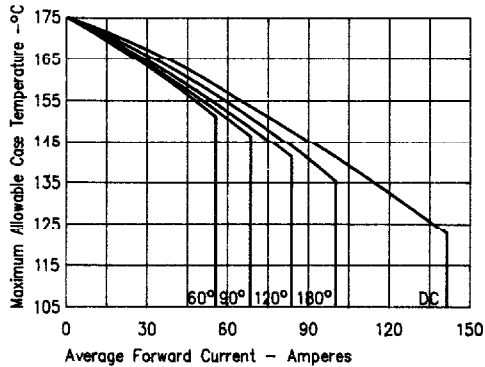


Figure 2  
Typical Reverse Characteristics - Per Leg

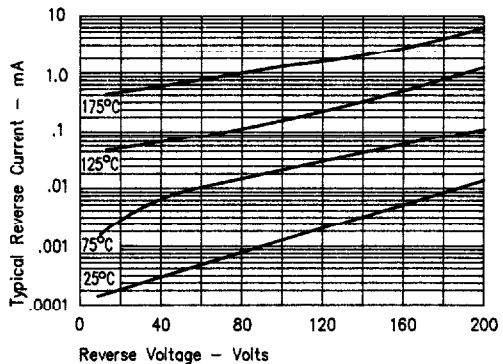
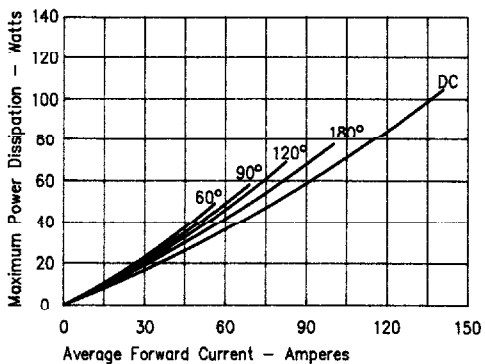


Figure 5  
Maximum Forward Power Dissipation - Per Leg



# UFT 201

Figure 1  
Typical Forward Characteristics - Per Leg

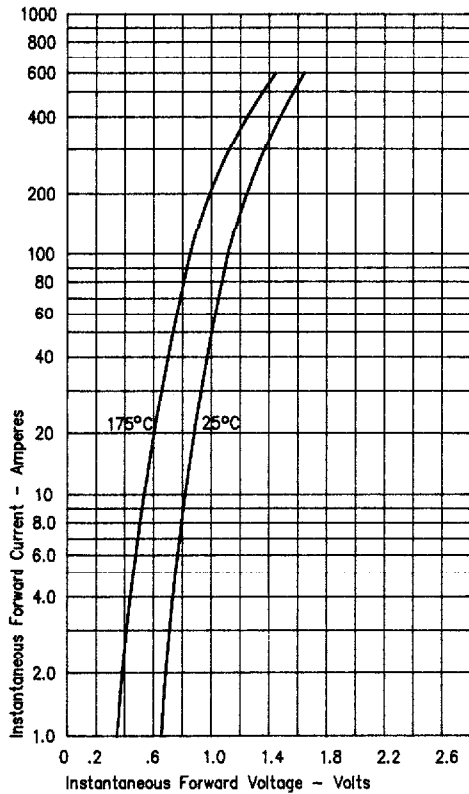


Figure 3  
Typical Junction Capacitance - Per Leg

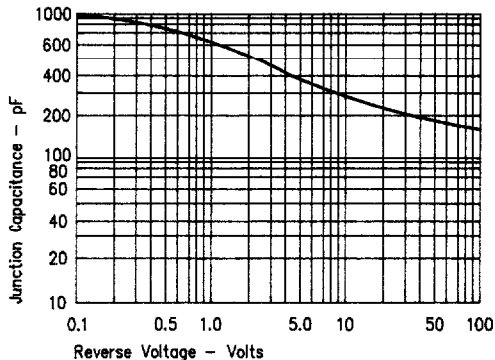


Figure 4  
Forward Current Derating - Per Leg

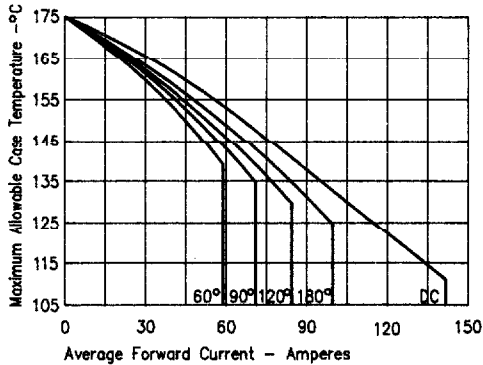


Figure 2  
Typical Reverse Characteristics - Per Leg

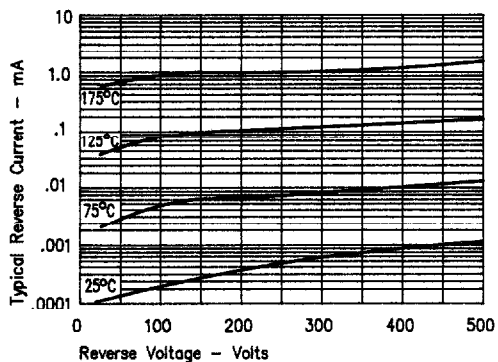


Figure 5  
Maximum Forward Power Dissipation - Per Leg

