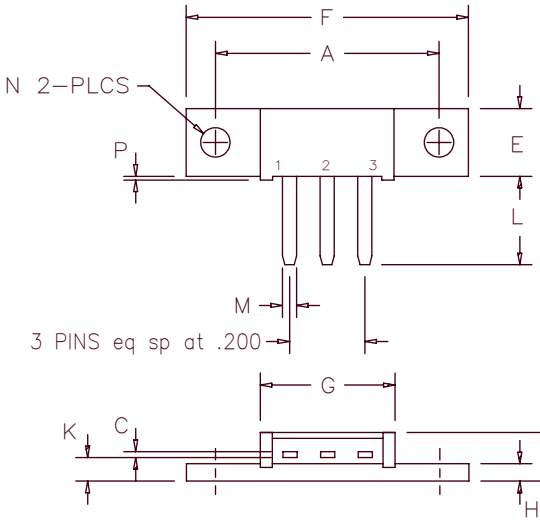
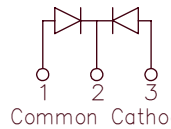
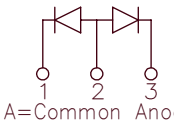
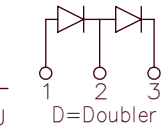
Ultrafast Recovery Modules
UFT70, 71 & 72









Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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
UFT7010*	100V	100V
UFT7015*	150V	150V
UFT7020* UFT7120*	200V	200V
UFT7130*	300V	300V
UFT7140*	400V	400V
UFT7250* UFT7150*	500V	500V
UFT7260*	600V	600V
UFT7270*	700V	700V
UFT7280*	800V	800V

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

- Ultra Fast Recovery
- 175°C Junction temperature
- V_{RRM} 100 to 800 Volts
- 2 X 35 Amp current rating
- ROHS Compliant

Electrical Characteristics

		UFT70	UFT71	UFT72	
Average forward current per pkg	$I_{F(AV)}$	70A	70A	70A	Square Wave
Average forward current per leg	$I_{F(AV)}$	35A	35A	35A	Square Wave
Case Temperature	T_C	148°C	142°C	138°C	$R_{\theta JC}$ = 1.0°C/W
Maximum surge current per leg	I_{FSM}	700A	600A	500A	8.3 ms, half sine, T_J = 175°C
Max peak forward voltage per leg	V_{FM}	.95V	1.20V	1.35V	I_{FM} = 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
Max peak reverse current per leg	I_{RM}	———	3.0mA	———	V_{RRM}, T_J = 125°C
Max peak reverse current per leg	I_{RM}	———	25µA	———	V_{RRM}, T_J = 25°C
Typical junction capacitance per leg	C_J	300pF	120pF	115pF	V_R = 10V, T_J = 25°C

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

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	−55°C to 175°C
Operating junction temp range	T_J	−55°C to 175°C
Max thermal resistance per leg	$R_{\theta JC}$	1.0°C/W Junction to case
Max thermal resistance per pkg	$R_{\theta JC}$	0.5°C/W Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	0.3°C/W Case to sink
Mounting Torque		10 inch pounds maximum
Weight		0.3 ounce (8.4 grams) typical

UFT70

Figure 1
Typical Forward Characteristics – Per Leg

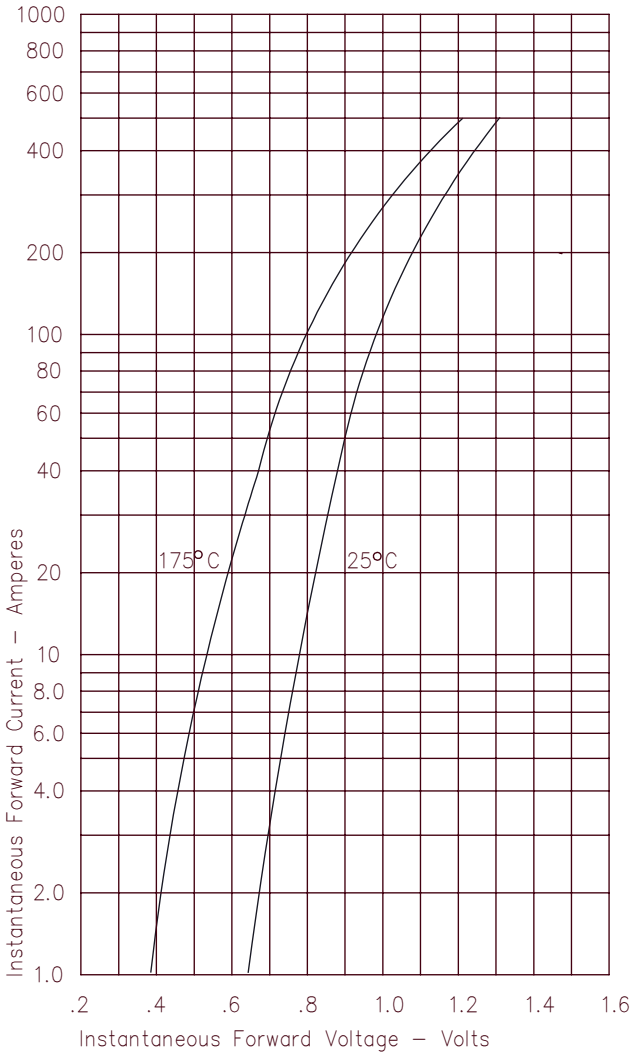


Figure 2
Typical Reverse Characteristics – Per Leg

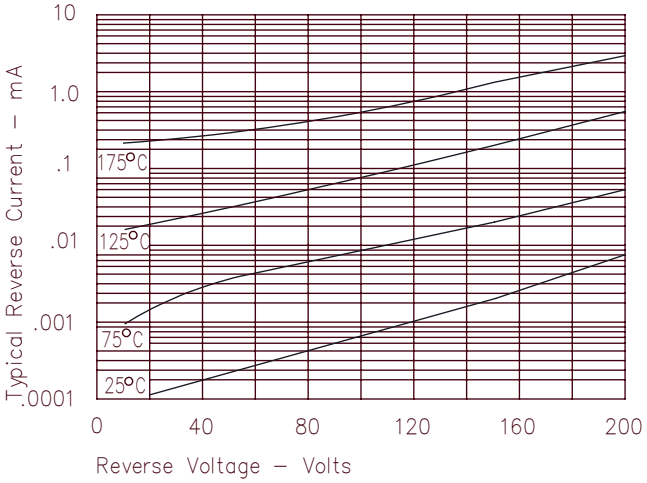


Figure 3
Typical Junction Capacitance – Per Leg

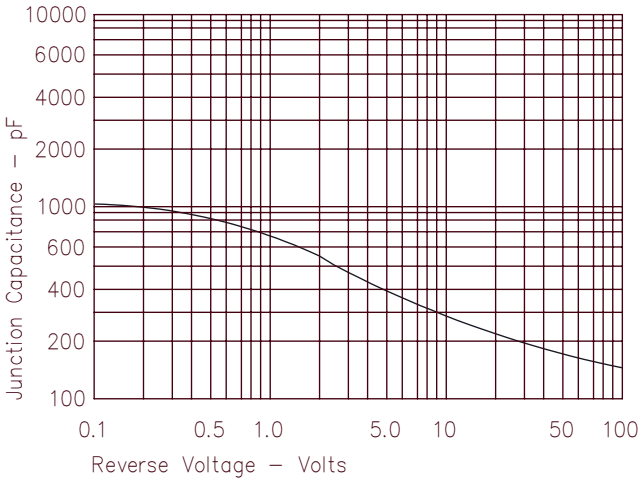


Figure 4
Forward Current Derating – Per Leg

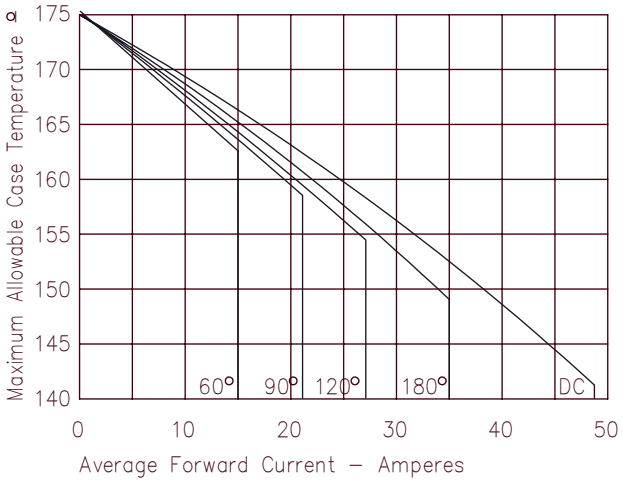
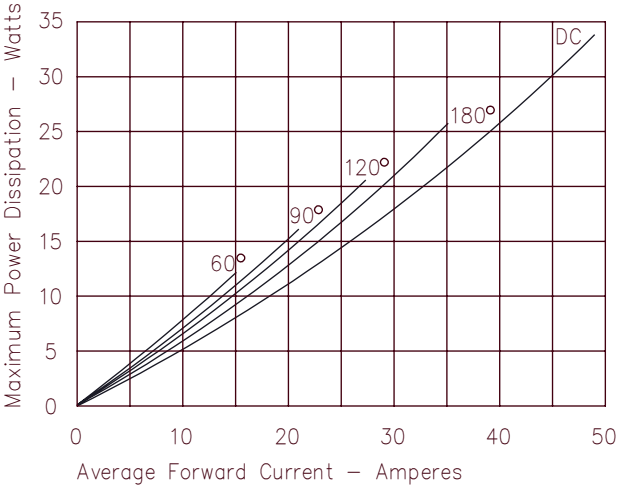


Figure 5
Maximum Forward Power Dissipation – Per Leg



UFT71

Figure 1
Typical Forward Characteristics – Per Leg

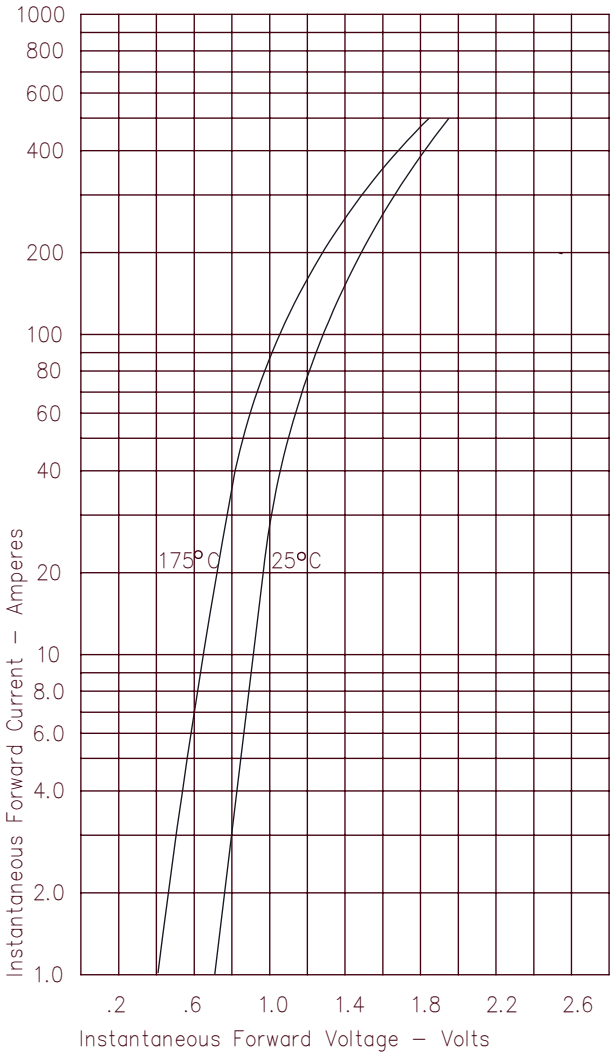


Figure 2
Typical Reverse Characteristics – Per Leg

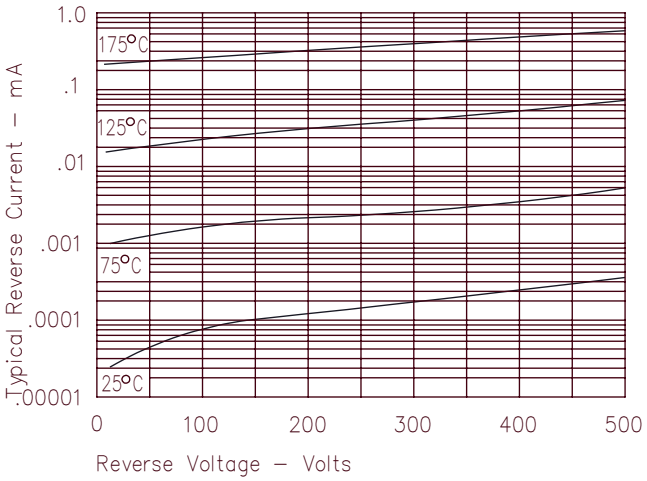


Figure 3
Typical Junction Capacitance – Per Leg

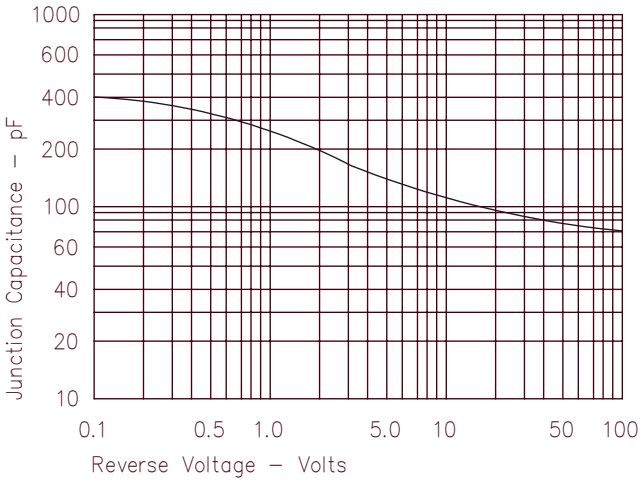


Figure 4
Forward Current Derating – Per Leg

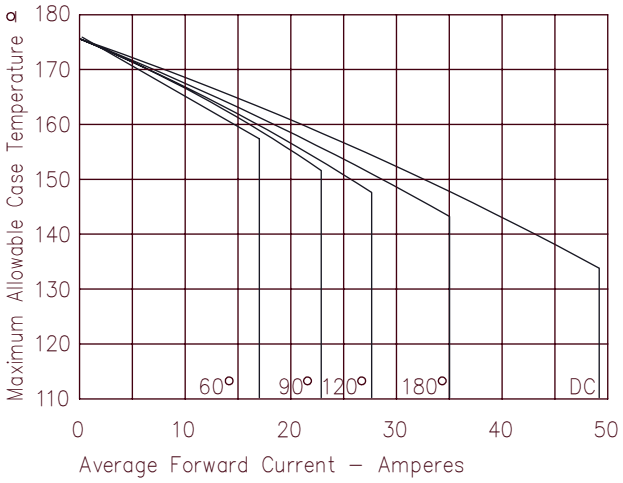
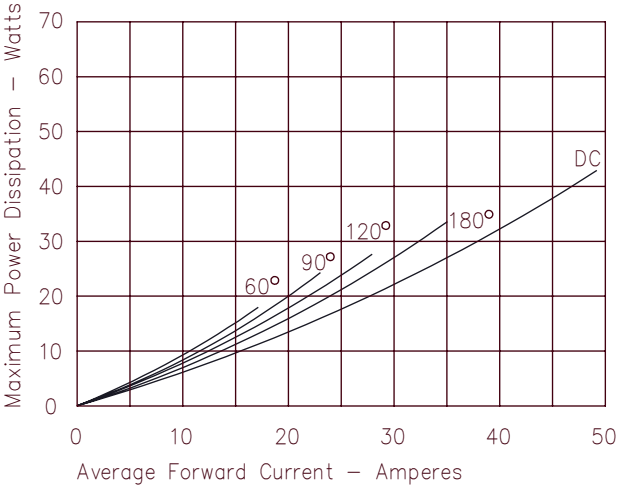


Figure 5
Maximum Forward Power Dissipation – Per Leg



UFT72

Figure 1
Typical Forward Characteristics – Per Leg

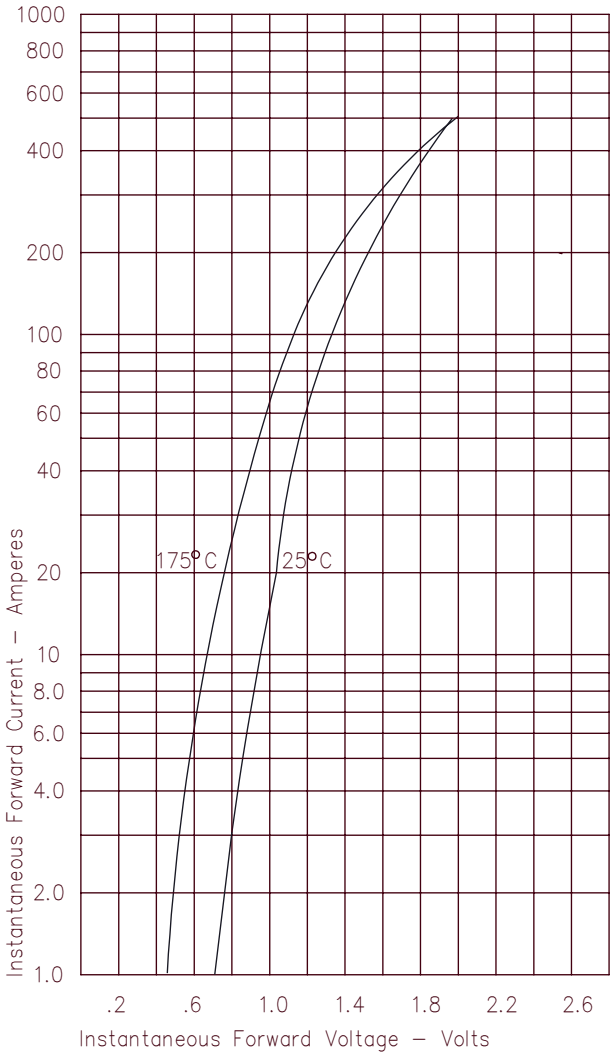


Figure 2
Typical Reverse Characteristics – Per Leg

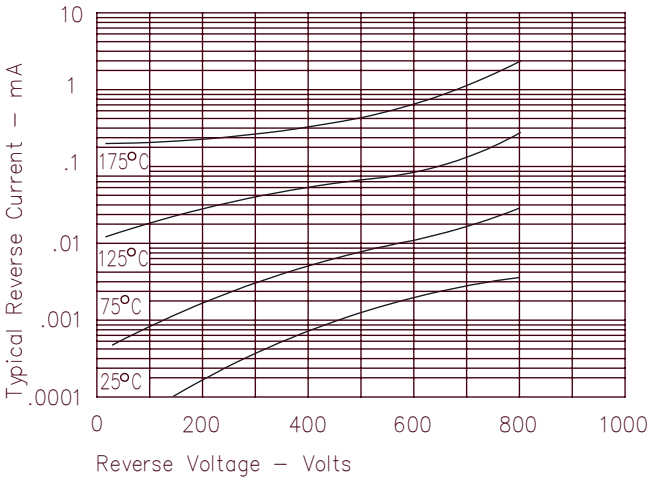


Figure 3
Typical Junction Capacitance – Per Leg

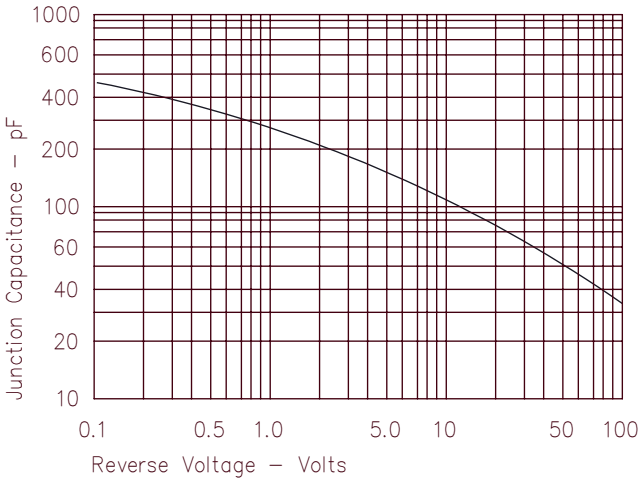


Figure 4
Forward Current Derating – Per Leg

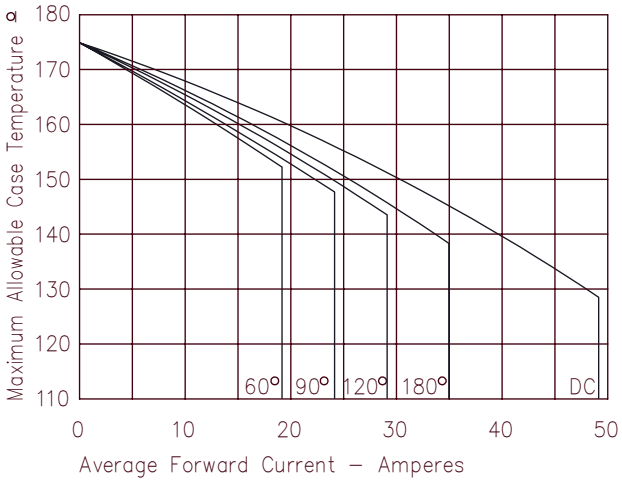


Figure 5
Maximum Forward Power Dissipation – Per Leg

