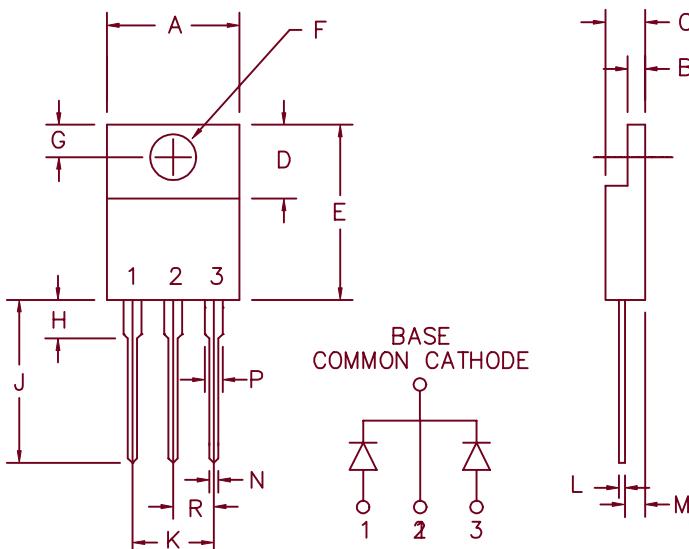


Ultra Fast Recovery Rectifiers

UFT2060 — UFT2080



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.390	.415	9.91	10.54	
B	.045	.055	1.14	1.40	
C	.180	.190	4.57	4.83	
D	.245	.260	6.22	6.60	
E	.550	.650	13.97	16.51	
F	.139	.161	3.53	4.09	Dia.
G	.100	.135	2.54	3.43	
H	---	.250	---	6.35	
J	.500	.580	12.70	14.73	
K	.190	.210	4.83	5.33	
L	.014	.022	.350	.550	
M	.080	.115	2.03	2.92	
N	.015	.040	.380	1.02	
P	.045	.070	1.14	1.78	
R	.090	.110	2.29	2.79	

PLASTIC TO-220AB

Microsemi
Catalog Number

Repetitive Peak
Reverse Voltage

Transient Peak
Reverse Voltage

UFT2060
UFT2070
UFT2080

600V
700V
800V

600V
700V
800V

- Ultra Fast Recovery Rectifier
- 175°C Junction Temperature
- 2 x 10 Amp current rating
- V_{RRM} 600 to 800 Volts
- trr 70ns maximum

Electrical Characteristics

Average Forward Current per pkg.

$I_{F(AV)}$ 20 Amps

$T_C = 153^\circ\text{C}$, Square wave, $R_{\theta JC} = 1.0^\circ\text{C}/\text{W}$

Average Forward Current per leg

$I_{F(AV)}$ 10 Amps

$T_C = 153^\circ\text{C}$, Square wave, $R_{\theta JC} = 2.0^\circ\text{C}/\text{W}$

Maximum Surge Current per leg

I_{FSM} 175 Amps

8.3ms, half sine, $T_J = 175^\circ\text{C}$

Max. Peak Forward Voltage per leg

V_{FM} 1.25 Volts

$I_{FM} = 10\text{A}, T_J = 25^\circ\text{C}^*$

Max. Peak Reverse Current per leg

I_{RM} 10 μA

$V_{RRM}, T_J = 25^\circ\text{C}$

Maximum Reverse Recovery Time per leg

trr 70 ns

1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$

Typical Junction Capacitance per leg

C_J 45 pF

$V_R = 10\text{V}, T_J = 25^\circ\text{C}, f = 1\text{MHz}$

*Pulse test: Pulse width 300 μsec 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

$R_{\theta JC}$

2.0°C/W Junction to case

Max thermal resistance per pkg.

$R_{\theta JC}$

1.0°C/W Junction to case

Mounting torque

10-15 inch pounds

Weight

.08 ounces (2.3 grams) typical

UFT2060 - UFT2080

Figure 1
Typical Forward Characteristics – Per Leg

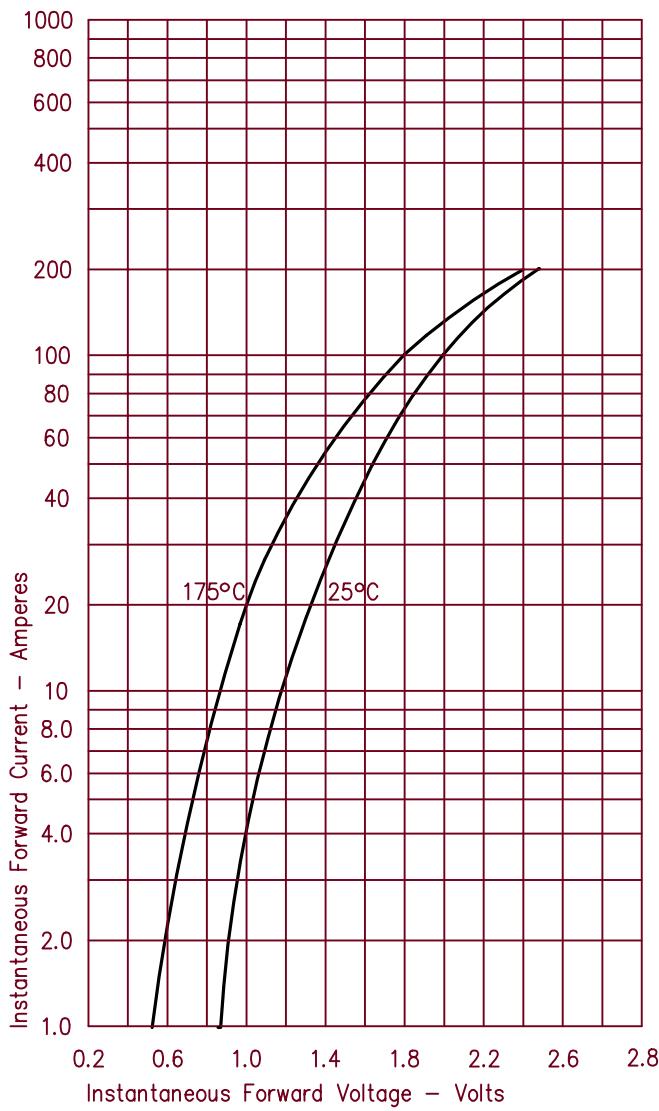


Figure 2
Typical Reverse Characteristics – Per Leg

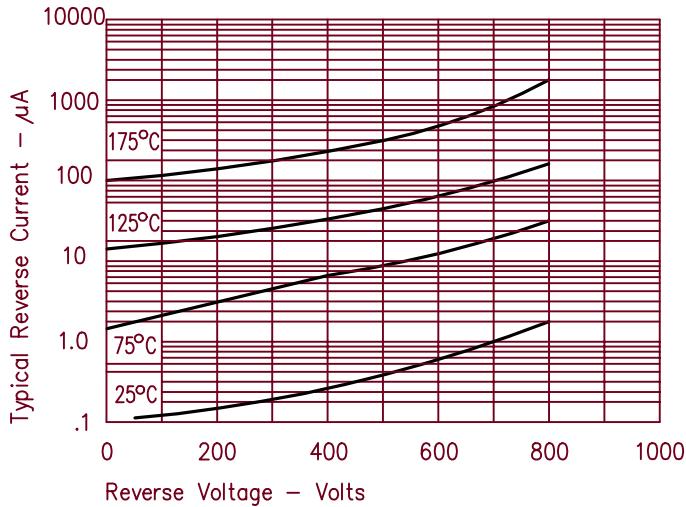


Figure 3
Typical Junction Capacitance – Per Leg

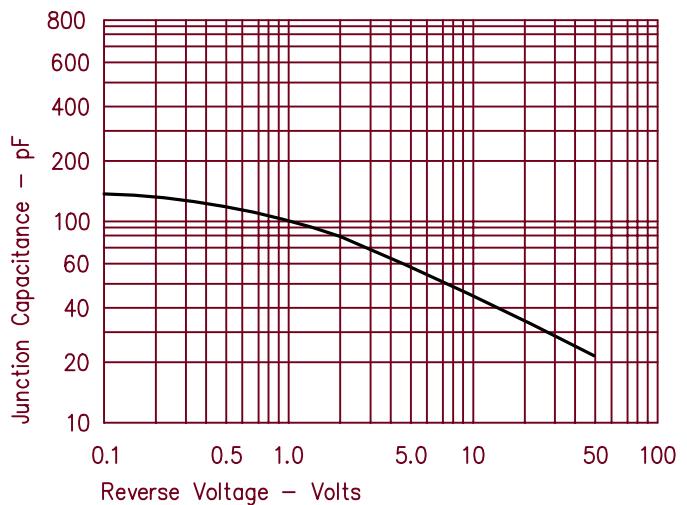


Figure 4
Forward Current Derating – Per Leg

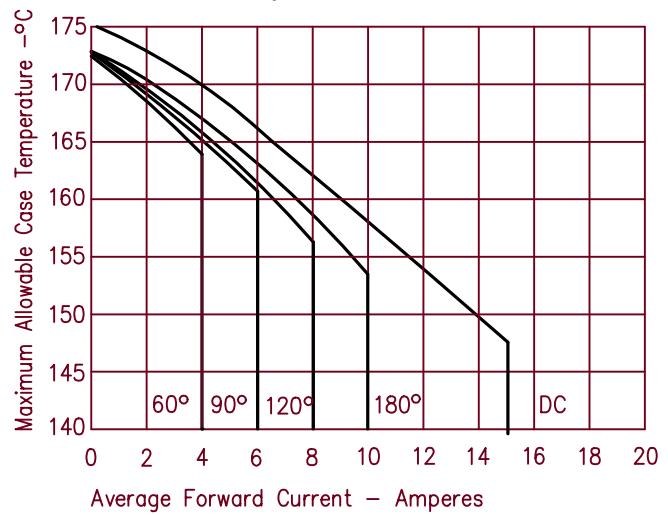


Figure 5
Maximum Forward Power Dissipation – Per Leg

