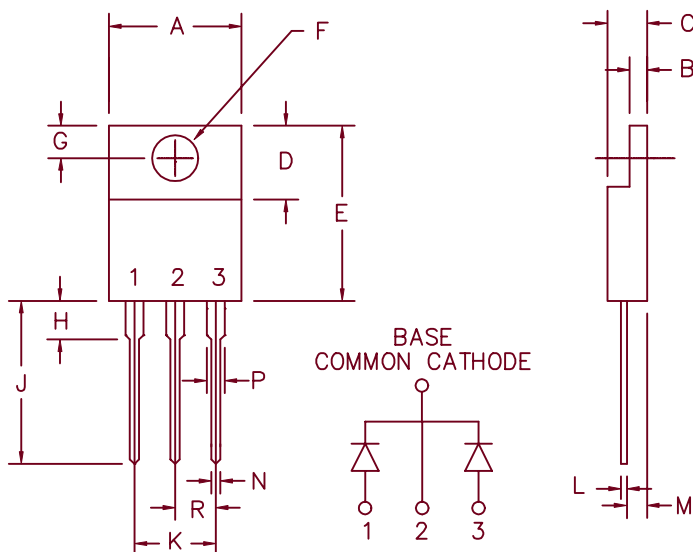


Ultra Fast Recovery Rectifiers UFT1210 – UFT1220



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	.357	.559	
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
UFT1210	100V	100V
UFT1215	150V	150V
UFT1220	200V	200V

- Ultra Fast Recovery Rectifier
- 175°C Junction Temperature
- V_{RRM} 100 to 200 Volts
- 2 x 6 Amp current rating
- t_{rr} 30 nsec maximum

Electrical Characteristics

Average forward current per pkg	$I_{F(AV)}$ 12 Amps	$T_C = 165^\circ\text{C}$, Square wave, $R_{\theta JC} = 1.0^\circ\text{C/W}$
Average forward current per leg	$I_{F(AV)}$ 6 Amps	$T_C = 165^\circ\text{C}$, Square wave, $R_{\theta JC} = 2.0^\circ\text{C/W}$
Maximum surge current	I_{FSM} 125 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max. peak forward voltage	V_{FM} 1.2 Volts	$I_{FM} = 6\text{A}$, $T_J = 25^\circ\text{C}^*$
Max. reverse recovery time	I_{RM} 10 μA	V_{RRM} , $T_J = 25^\circ\text{C}$
Max. peak reverse current	t_{RR} 70 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J 56 pF	$V_R = 10\text{V}$, $f = 1\text{MHz}$, $T_J = 25^\circ\text{C}$

*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

UFT1210 – UFT1220

Figure 1
Typical Forward Characteristics – Per Leg

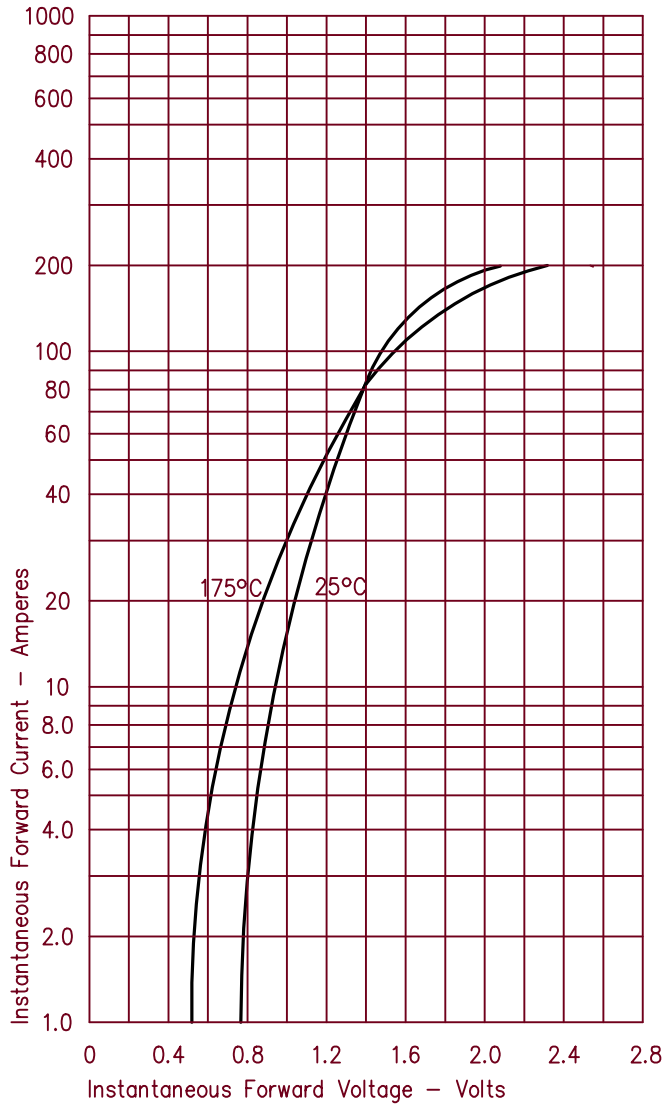


Figure 3
Typical Junction Capacitance – Per Leg

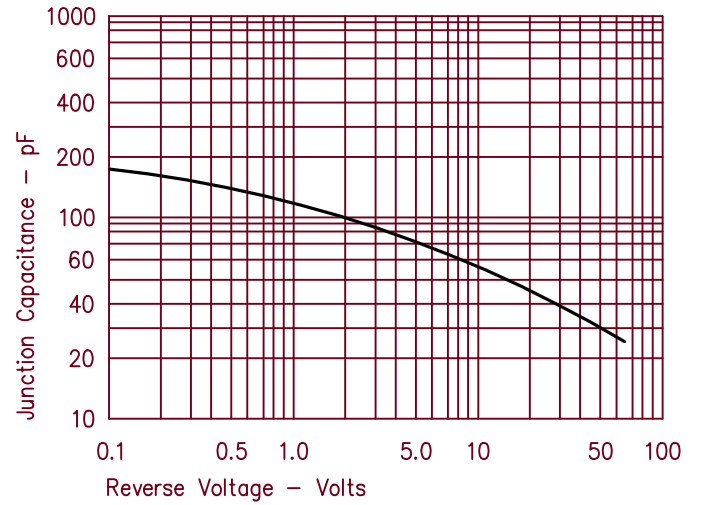


Figure 4
Forward Current Derating – Per Leg

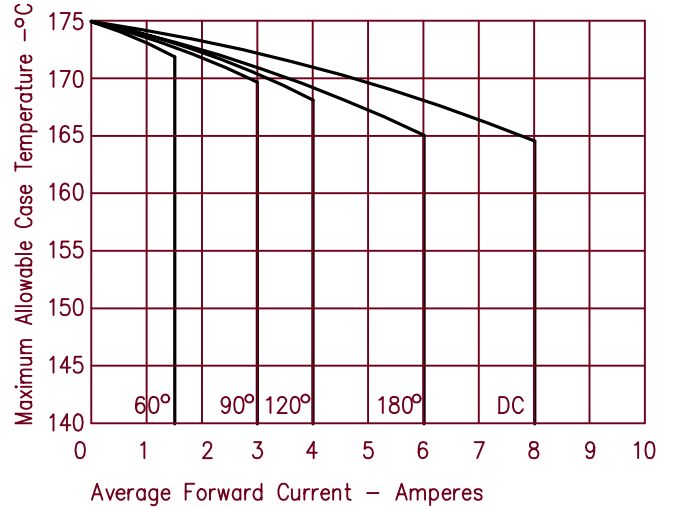


Figure 2
Typical Reverse Characteristics – Per Leg

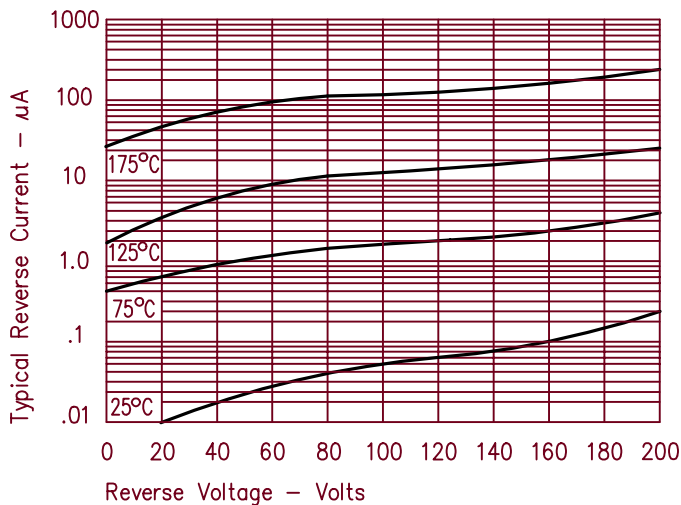


Figure 5
Maximum Forward Power Dissipation – Per Leg

