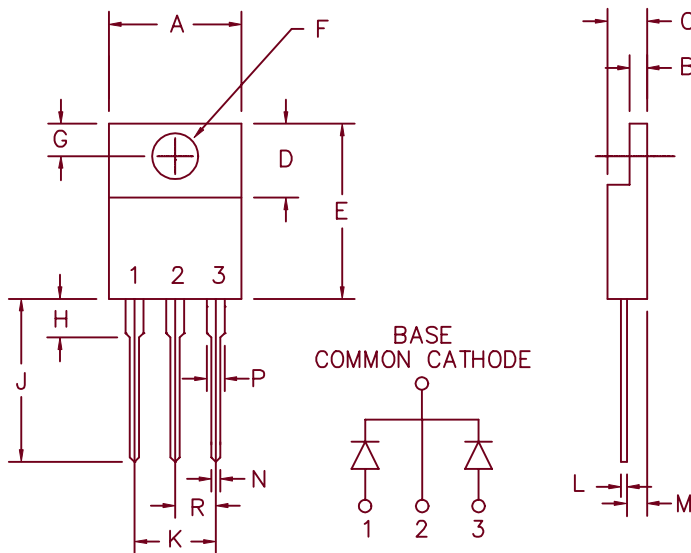


Ultra Fast Recovery Rectifiers UFT1230 — UFT1250



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

UFT1230
UFT1240
UFT1250

Repetitive Peak
Reverse Voltage

300V
400V
500V

Transient Peak
Reverse Voltage

300V
400V
500V

- Ultra Fast Recovery Rectifier
- 175°C Junction Temperature
- V_{RRM} 300 TO 500 Volts
- 2 x 6 Amps current rating
- t_{RR} 50 nsec maximum

Electrical Characteristics

Average forward current per pkg
Average forward current per leg
Maximum surge current
Max peak forward voltage
Max reverse recovery time
Max peak reverse current
Typical junction capacitance

$I_F(AV)$ 12 Amps
 $I_F(AV)$ 6 Amps
 I_{FSM} 125 Amps
 V_{FM} 1.2 Volts
 t_{RR} 50 ns
 I_{RM} 10 μ A
 C_J 28pF

$T_C = 160^\circ\text{C}$, Square wave, $R_{\theta JC} = 1^\circ\text{C/W}$
 $T_C = 160^\circ\text{C}$, Square wave, $R_{\theta JC} = 2^\circ\text{C/W}$
8.3ms, half sine, $T_J = 175^\circ\text{C}$
 $I_{FM} = 6\text{A}$; $T_J = 25^\circ\text{C}^*$
1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
 $V_{RRM}, T_J = 25^\circ\text{C}$
 $V_R = 10\text{V}, T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range
Operating junction temp range
Max thermal resistance per leg
Max thermal resistance per pkg.
Mounting torque
Weight

T_{STG}
 T_J
 $R_{\theta JC}$
 $R_{\theta Jc}$

-55°C to 175°C
 -55°C to 175°C
 2.0°C/W Junction to Case
 1.0°C/W Junction to Case
10–15 inch pounds
0.08 ounces (2.3 grams) typical

UFT1230 – UFT1250

Figure 1
Typical Forward Characteristics – Per Leg

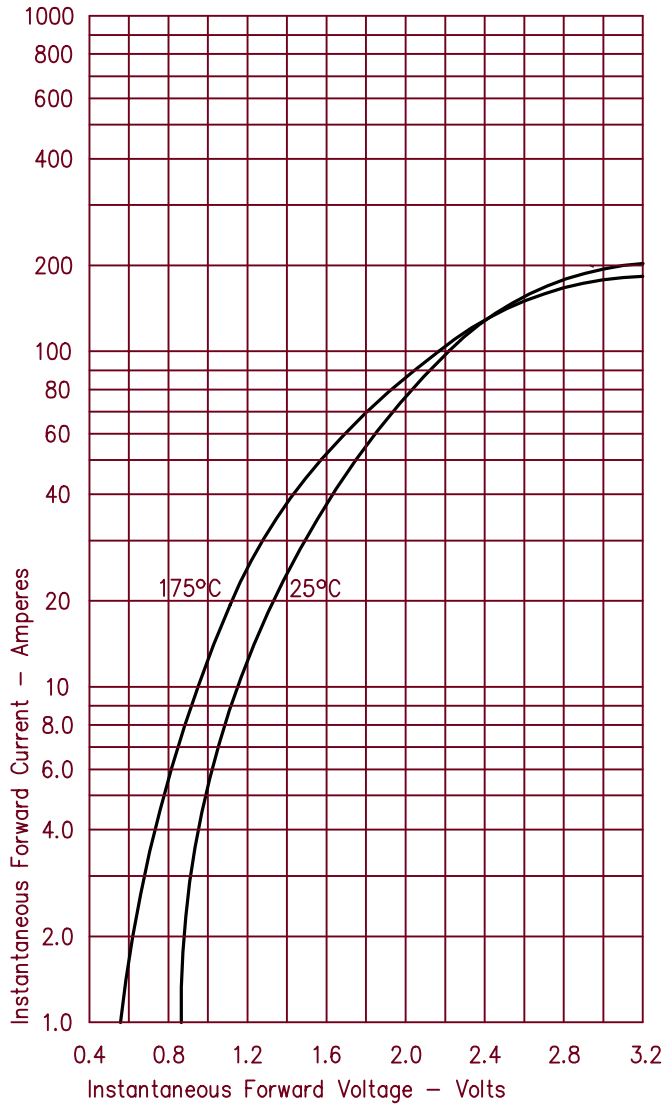


Figure 3
Typical Junction Capacitance – Per Leg

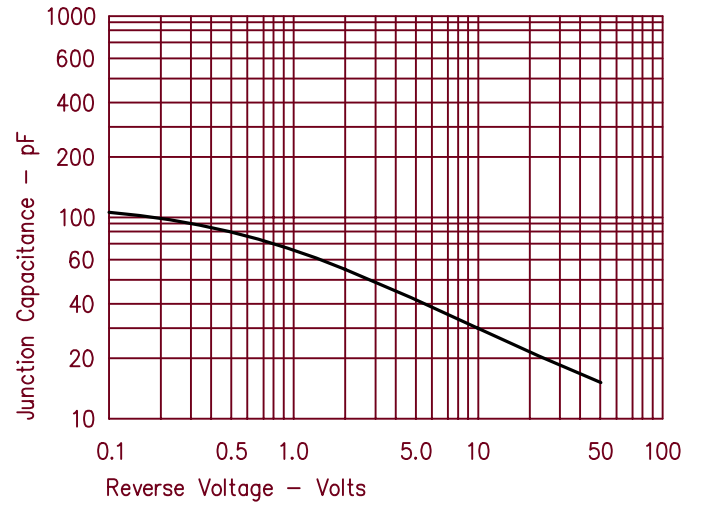


Figure 4
Forward Current Derating – Per Leg

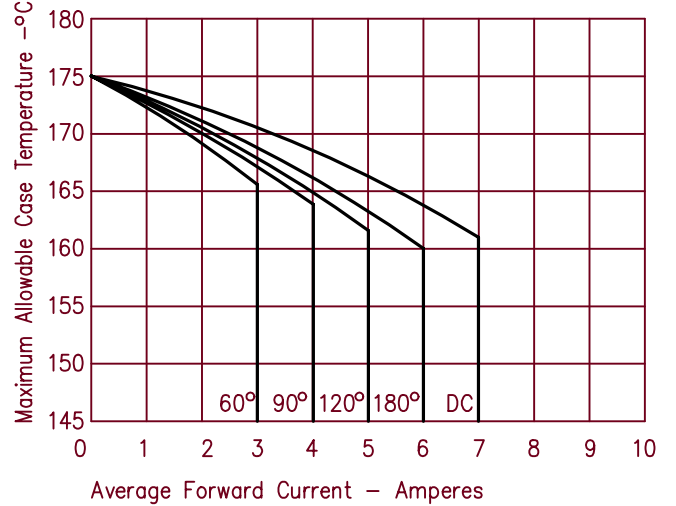


Figure 2
Typical Reverse Characteristics – Per Leg

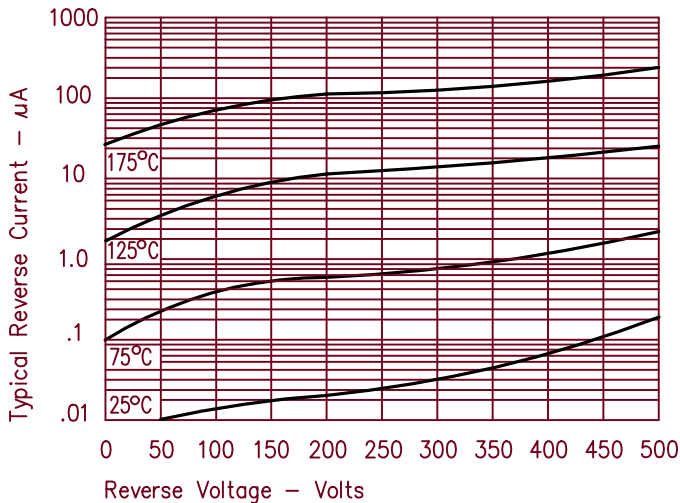


Figure 5
Maximum Forward Power Dissipation – Per Leg

