Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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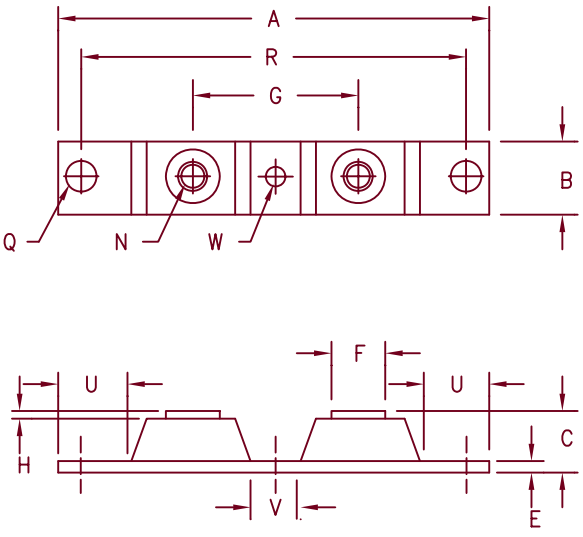
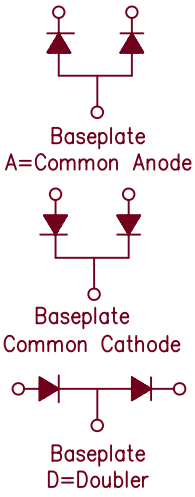
Ultrafast Recovery Modules
UFT125, 126 & 127





Notes:
Baseplate: Nickel plated copper; common cathode

Dim.	Inches		Millimeters		
	Min.	Max.	Min.	Max.	Notes
A	---	3.630	---	92.20	
B	0.700	0.800	17.78	20.32	
C	---	0.630	---	16.00	
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	0.010	---	0.25	---	
N	---	---	---	---	1/4-20
Q	0.275	0.290	6.99	7.37	Dia.
R	3.150 BSC		80.01 BSC		
U	0.600	---	15.24	---	
V	0.312	0.340	7.92	8.64	
W	0.180	0.195	4.57	4.95	Dia.

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UFT12505*	50V	50V
UFT12510*	100V	100V
UFT12515*	150V	150V
UFT12520*UFT12620*	200V	200V
UFT12630*	300V	300V
UFT12640*	400V	400V
UFT12650*	500V	500V
UFT12760*	600V	600V
UFT12770*	700V	700V
UFT12780*	800V	800V

Add Suffix A for Common Anode, D for Doubler

- Ultra Fast Recovery
- 175°C Junction Temperature
- V_{RRM} 50 to 800 Volts
- 120 Amps Current Rating
- 2 X 60 Amp current rating

Electrical Characteristics

		UFT125	UFT126	UFT127	
Average forward current per pkg	$I_{F(AV)}$	120A	120A	120A	Square Wave
Average forward current per leg	$I_{F(AV)}$	60A	60A	60A	Square Wave
Case Temperature	T_C	130°C	115°C	114°C	$R_{\theta JC}$ = 0.85°C/W
Maximum surge current per leg	I_{FSM}	800A	700A	600A	8.3ms, half sine, T_J = 175°C
Max peak forward voltage per leg	V_{FM}	.975V	1.25V	1.35V	I_{FM} = 60A, T_J = 25°C*
Max reverse recovery time per leg	trr	40ns	60ns	80ns	1/2A, 1A, 1/4A, T_J = 25°C
Max peak reverse current per leg	I_{RM}	———	2.0ma	———	V_{RRM}, T_J = 125°C*
Max peak reverse current per leg	I_{RM}	———	30µa	———	V_{RRM}, T_J = 25°C
Typical Junction capacitance	C_J	270pF	200pF	160pF	V_R = 10V, T_J = 25°C

*Pulse test: Pulse width 300 usec, 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	$R_{\theta JC}$	0.85°C/W Junction to case
Max thermal resistance per pkg	$R_{\theta JC}$	0.425°C/W Junction to case
Typical thermal resistance	$R_{\theta CS}$	0.08°C/W Case to sink
Terminal Torque		35-50 inch pounds
Mounting Base Torque - outside holes		30-40 inch pounds
Mounting Base Torque - (center hole)		8-10 inch pounds
center bolt must be torqued first		
Weight		2.8 ounces (75 grams) typical

SCOTTSDALE Microsemi

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Scottsdale, AZ 85252
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05-08-07 Rev. 2

UFT125

Figure 1
Typical Forward Characteristics – Per Leg

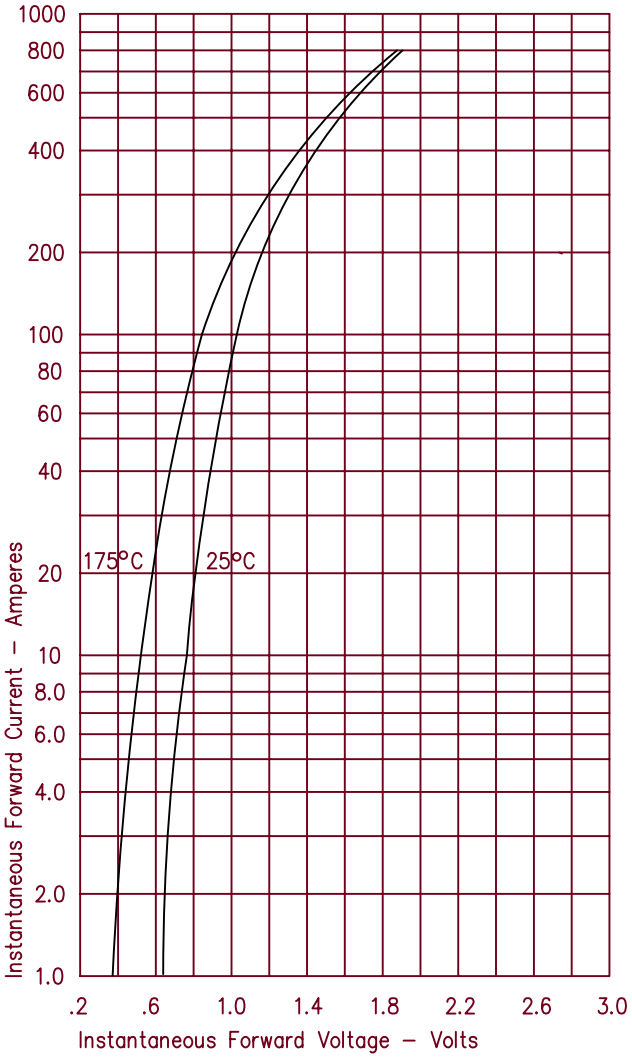


Figure 2
Typical Reverse Characteristics – Per Leg

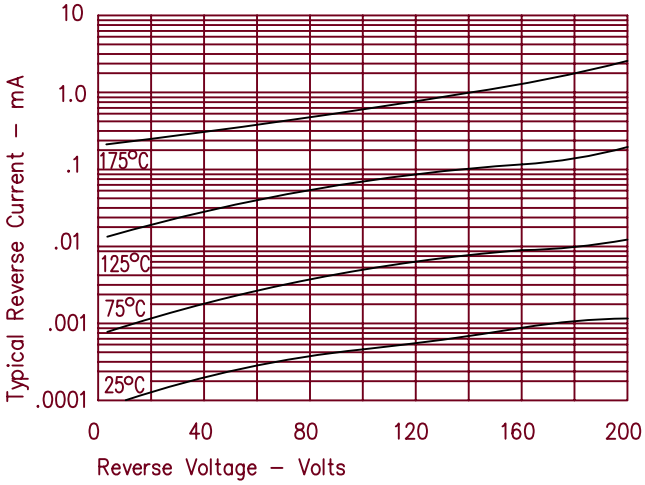


Figure 3
Typical Junction Capacitance – Per Leg

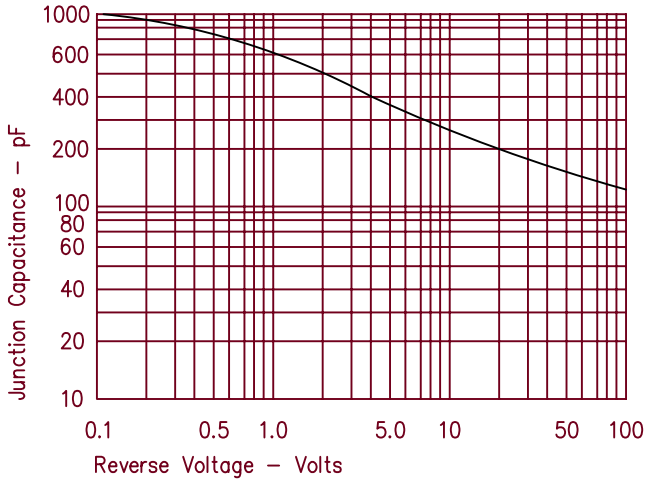


Figure 4
Forward Current Derating – Per Leg

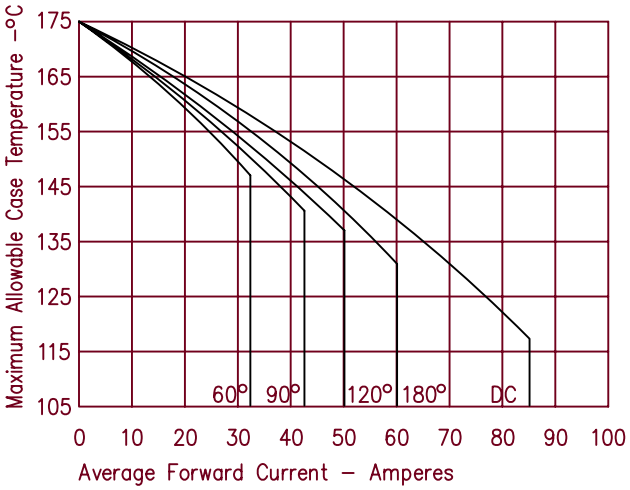
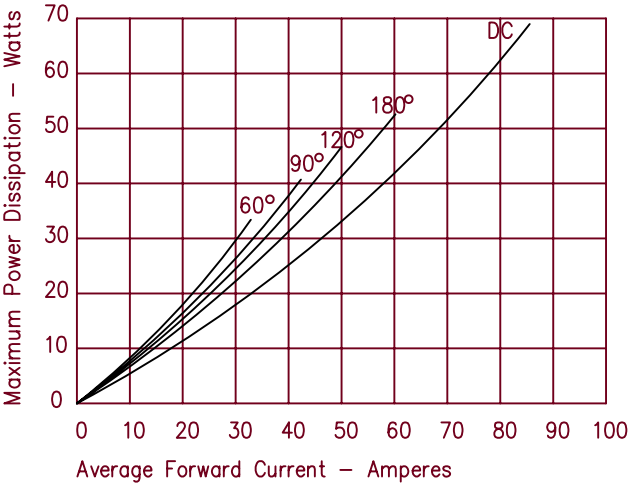


Figure 5
Maximum Forward Power Dissipation – Per Leg



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UFT126

Figure 1
Typical Forward Characteristics – Per Leg

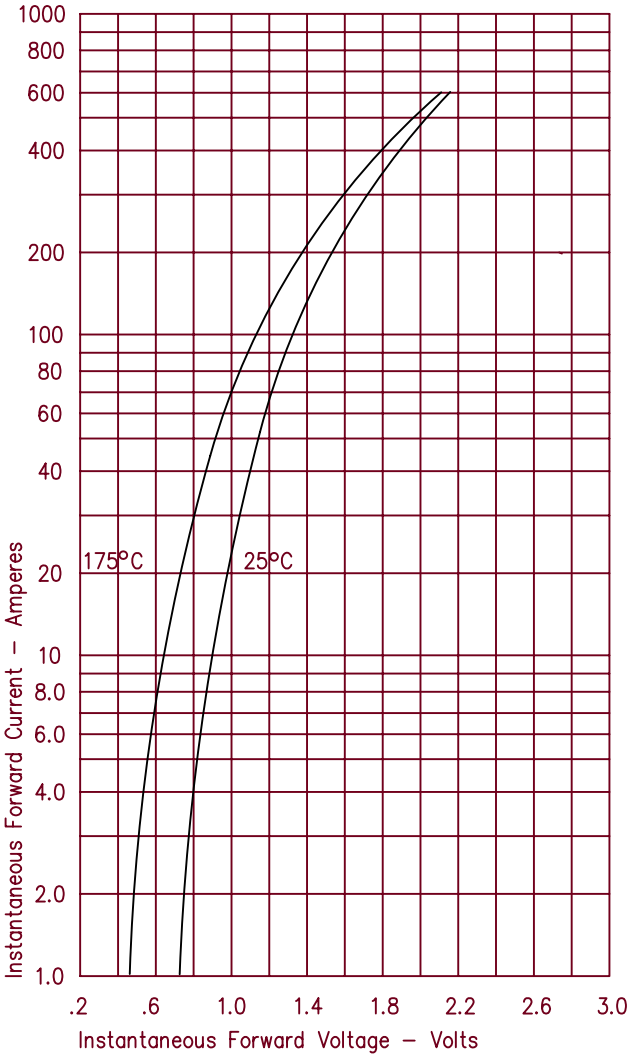


Figure 2
Typical Reverse Characteristics – Per Leg

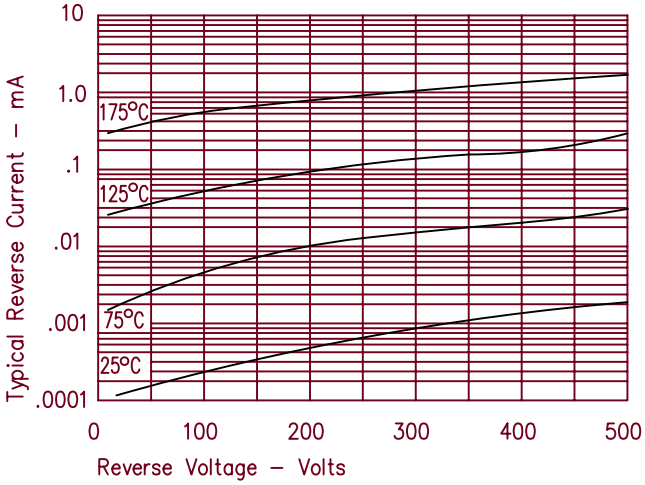


Figure 3
Typical Junction Capacitance – Per Leg

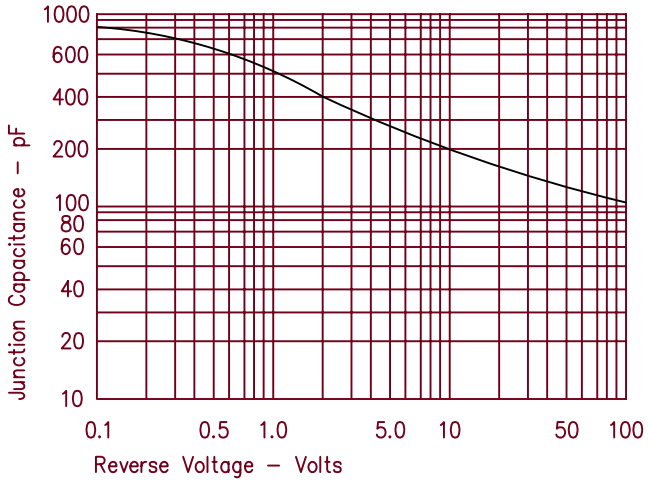


Figure 4
Forward Current Derating – Per Leg

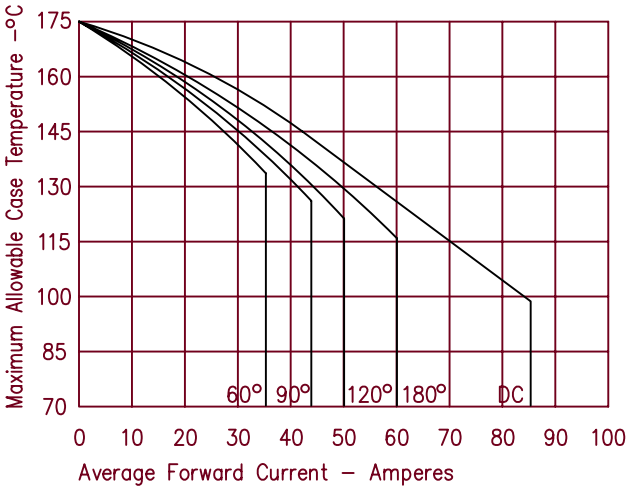
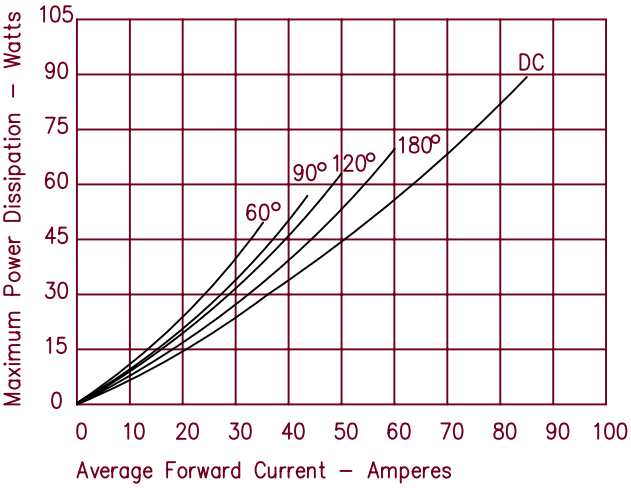


Figure 5
Maximum Forward Power Dissipation – Per Leg



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UFT127

Figure 1
Typical Forward Characteristics – Per Leg

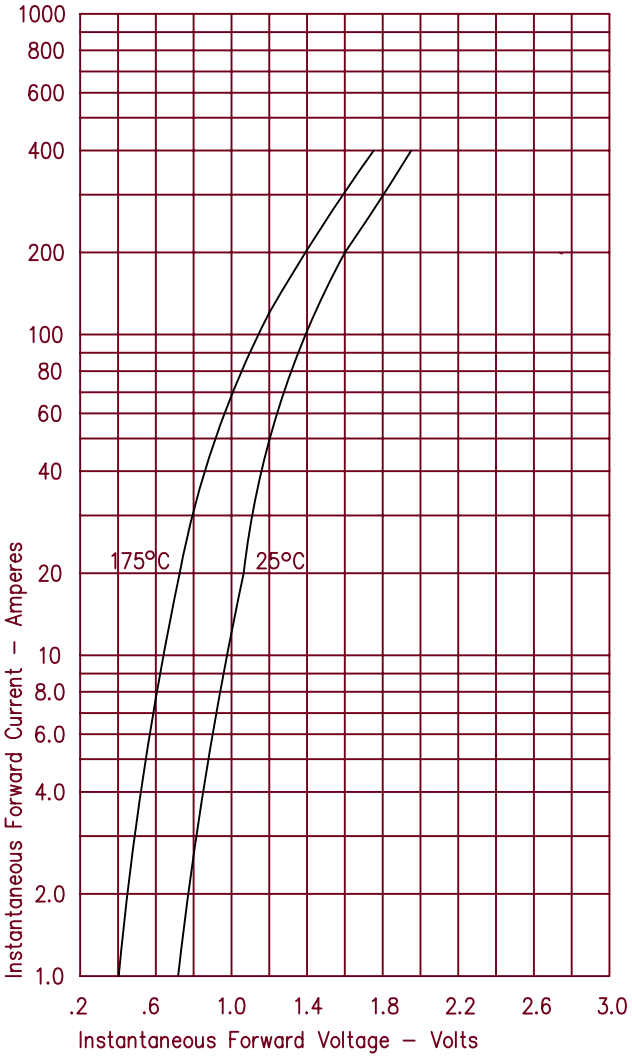


Figure 2
Typical Reverse Characteristics – Per Leg

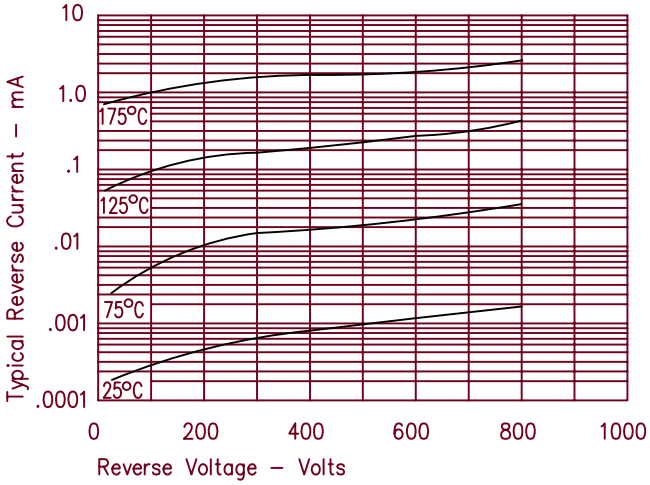


Figure 3
Typical Junction Capacitance – Per Leg

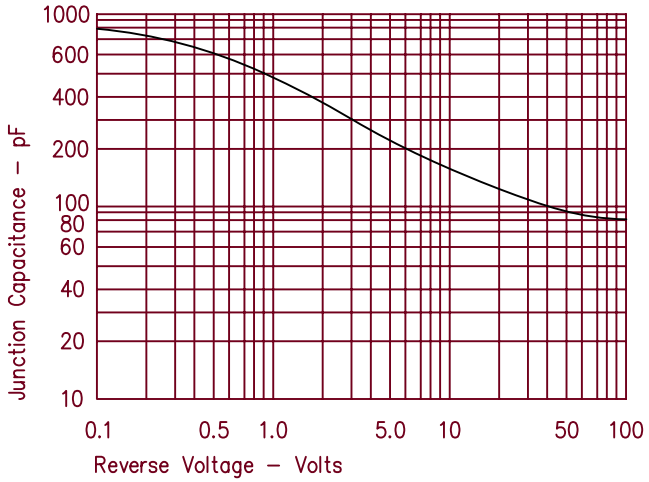


Figure 4
Forward Current Derating – Per Leg

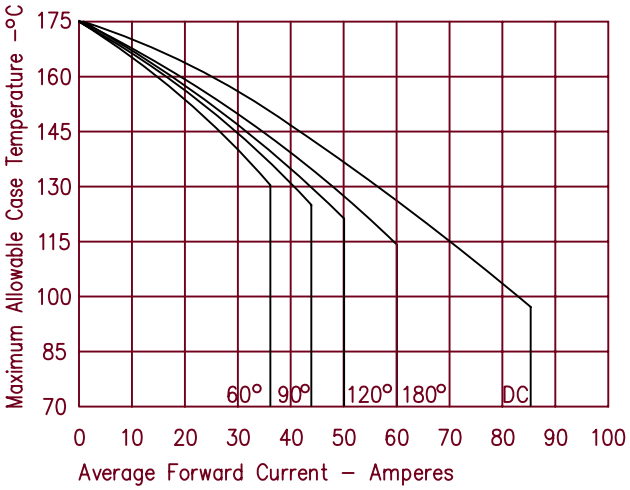
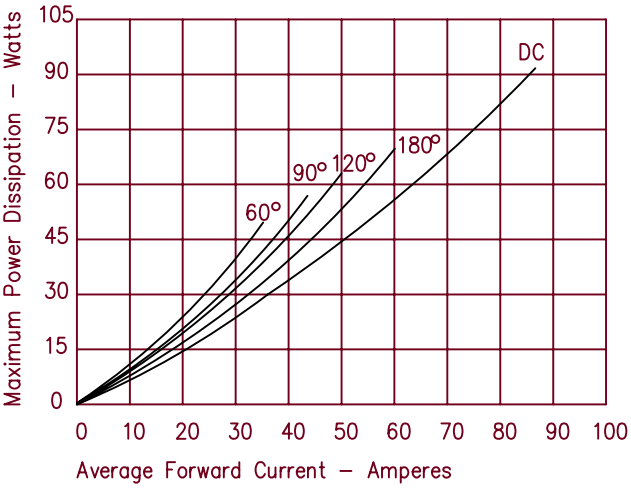


Figure 5
Maximum Forward Power Dissipation – Per Leg



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