



Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

Features

- High Power Surface Mount Package
- Guard Ring Protection
- Low Forward Voltage
- Integral Heat Sink/Locking Tabs
- Compatible with Automatic Insertion Equipment

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 23°C/W Junction To Tab
- Maximum Thermal Resistance; 10°C/W Junction To Bottom

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UPS120	BCF	20V	14V	20V
UPS130	BCG	30V	21V	30V
UPS140	BCJ	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

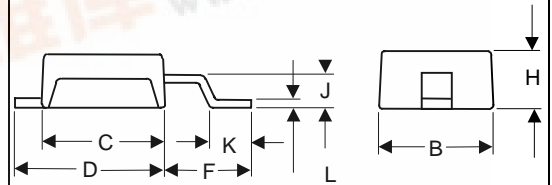
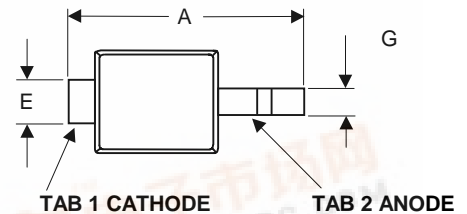
Average Forward Current	$I_{F(AV)}$	1.0A	$T_J = 135^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage UPS120 UPS130 UPS140	V_F	.45 V .55 V .55 V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage UPS120 UPS130 UPS140	I_R	.40/25mA .41/11mA .50/25mA	$T_J = 25^\circ\text{C}$ $T_J = 85^\circ\text{C}$ $V_R = 20\text{V}$ $V_R = 30\text{V}$ $V_R = 40\text{V}$

*Pulse test: Pulse width 200 μsec , Duty cycle 2%

UPS120 THRU UPS140

1 Amp Schottky Rectifier 20 to 40 Volts

DO-216AA (POWERMITE™)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.143	.153	3.63	3.89	
B	.070	.080	1.78	2.03	
C	.070	.080	1.78	2.03	
D	.087	.097	2.21	2.46	
E	.029	.039	0.74	0.99	
F	.051	.061	1.30	1.55	
G	-----	.026	-----	0.66	
H	.035	.045	0.89	1.14	
J	.021	.031	0.53	0.79	
K	-----	.025	-----	0.64	
L	-----	.006	-----	0.15	

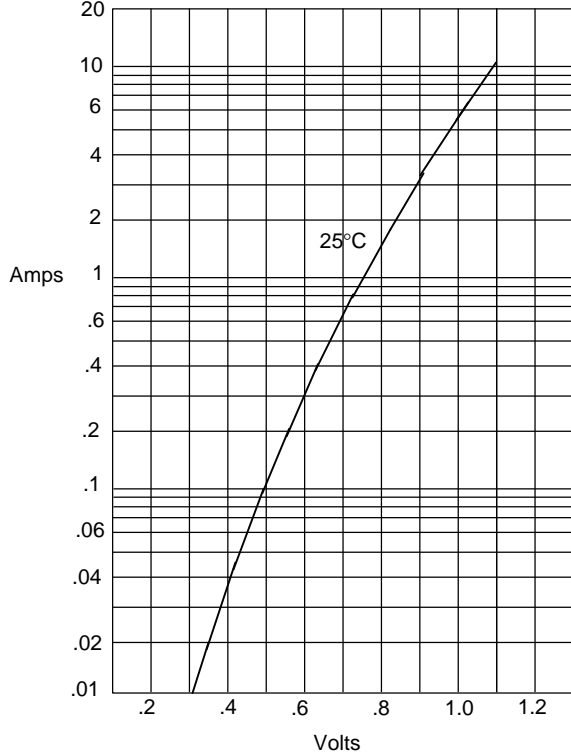


NOTE: POWERMITE™ package is patent by microsemi corp.

UPS120 thru UPS140

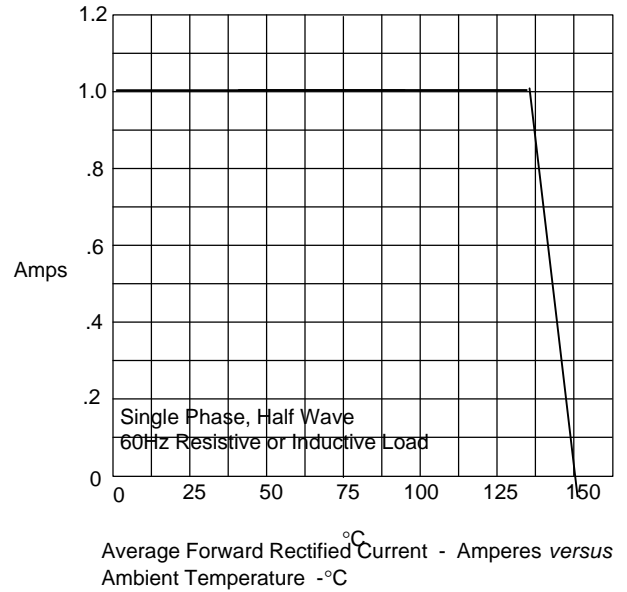


Figure 1
Typical Forward Characteristics



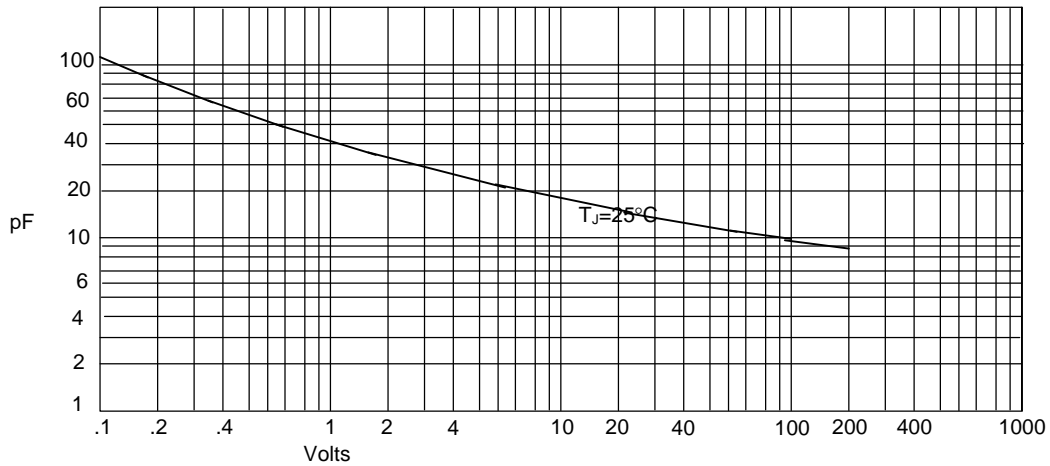
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



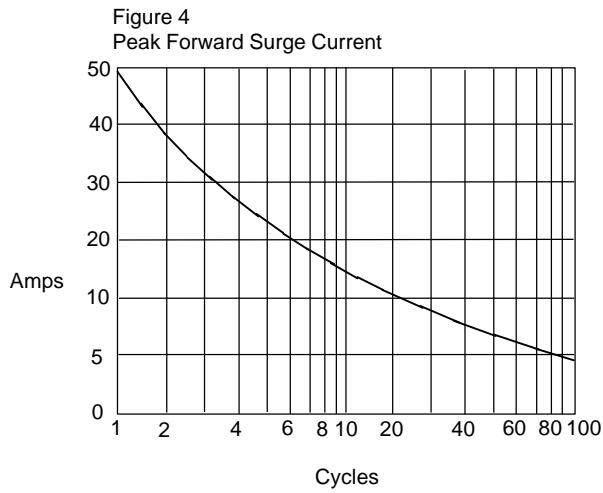
Single Phase, Half Wave
60Hz Resistive or Inductive Load
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



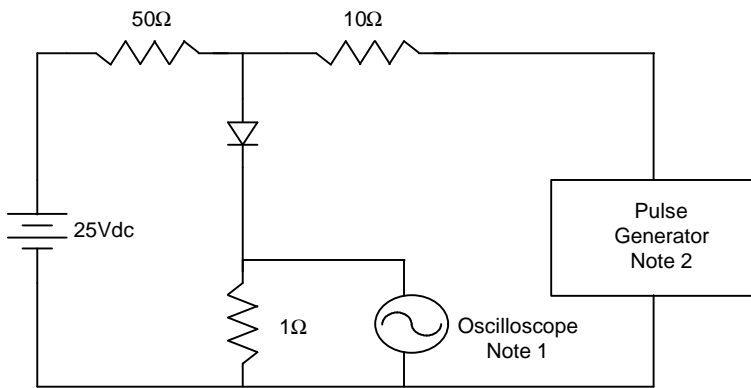
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

UPS120 thru UPS140



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
Source impedance = 50 ohms
3. Resistors are non-inductive

