



Micro Commercial Components
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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; 30°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
UPS120E	UPS120E	20V	14V	20V
UPS130E	UPS130E	30V	21V	30V
UPS140E	UPS140E	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

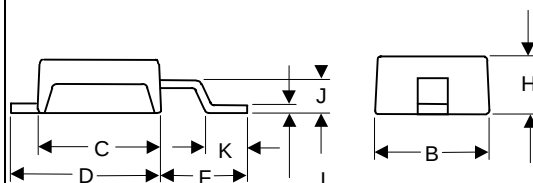
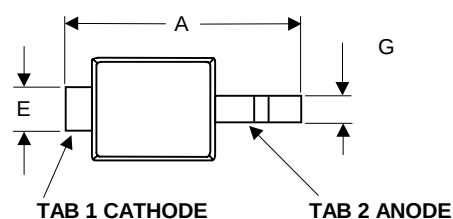
Average Forward Current	$I_{F(AV)}$	1.0A	$T_J = 130^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage UPS120E UPS130-140E	V_F	.45 V .55 V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0uA 500uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	150pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

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

UPS120E THRU UPS140E

1 Amp Schottky Rectifier 20 to 40 Volts

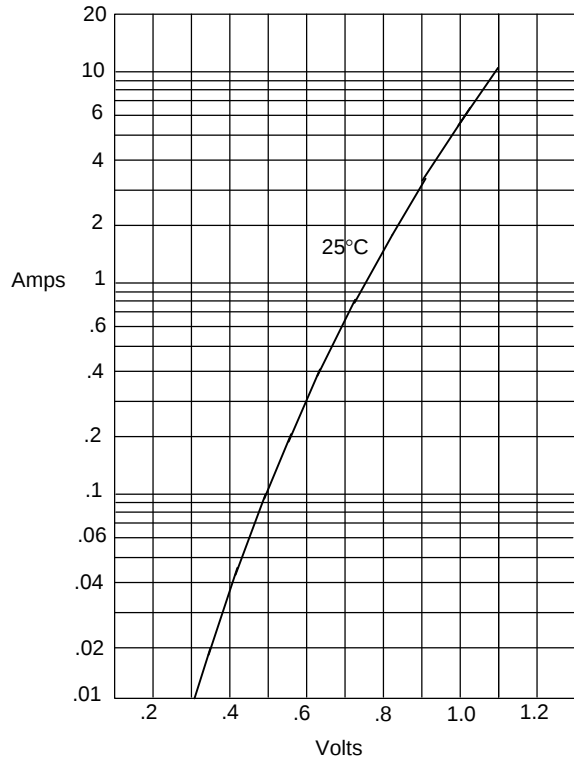
DO-216AA (POWERMITE™)



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	

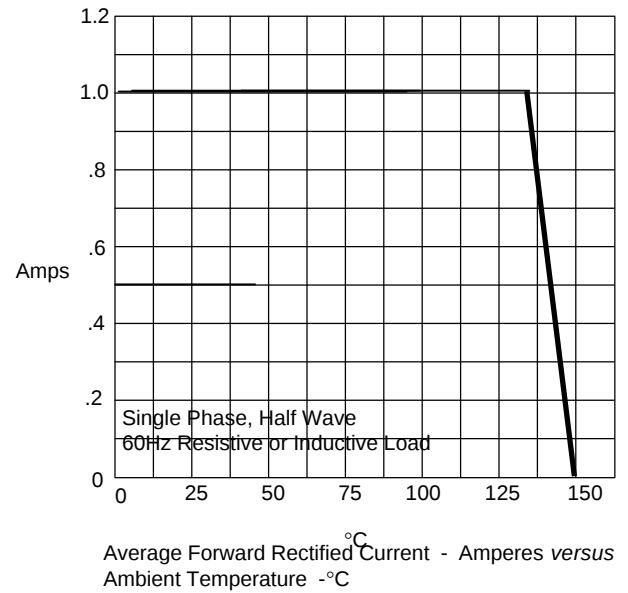
NOTE: POWERMITE™ package is patental by microsemi corp.

Figure 1
Typical Forward Characteristics



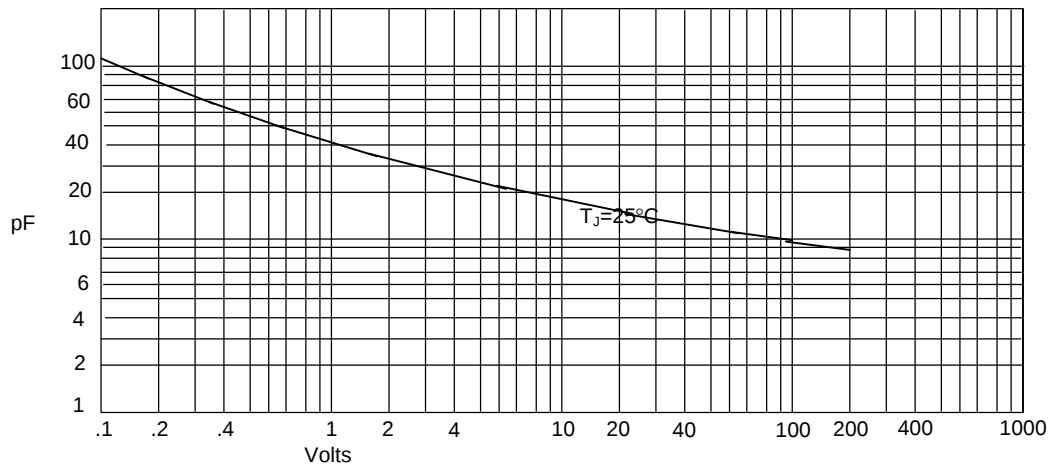
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

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

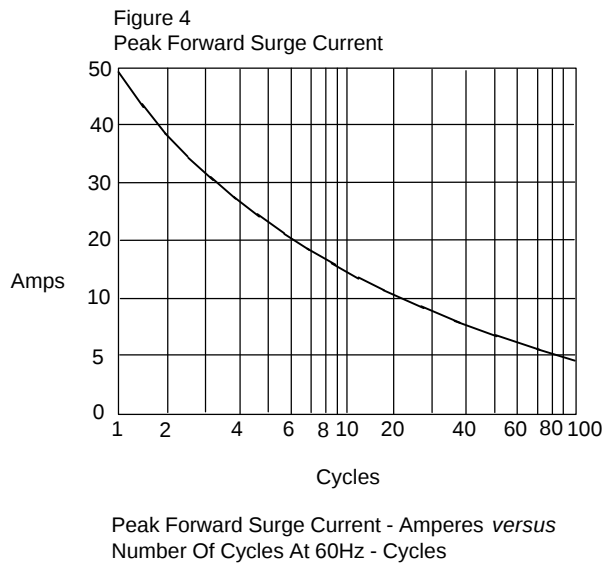
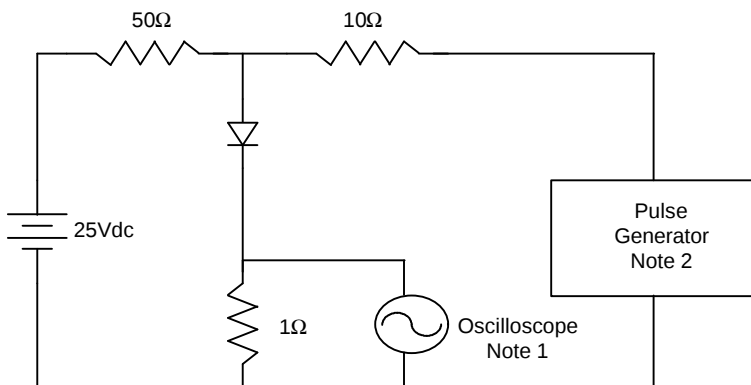


Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram



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

