

# DL5817 thru DL5819

## Features

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- Low Power Loss For High Efficiency
- High Current Capability
- Surface Mount Applications

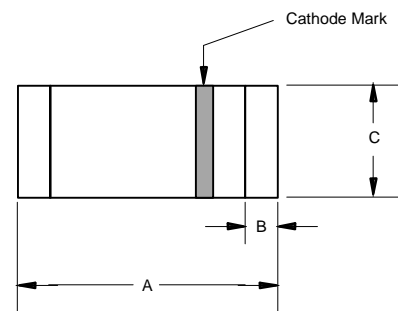
## 1 Amp Schottky Barrier Rectifier 20 - 40 Volts

## Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5817	---	20V	14V	20V
1N5818	---	30V	21V	30V
1N5819	---	40V	28V	40V

## MELF

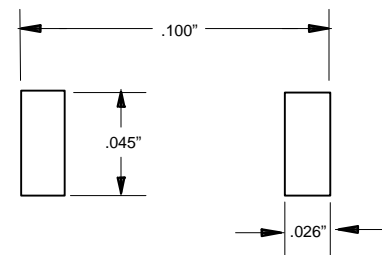


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.190	.205	4.80	5.20	
B	---	.022	---	.55	Nominal
C	.095	.099	2.40	2.50	∅

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.45V .55V .60V	$I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$
1N5817			
1N5818 1N5819			
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA	$T_J = 25^\circ\text{C}$

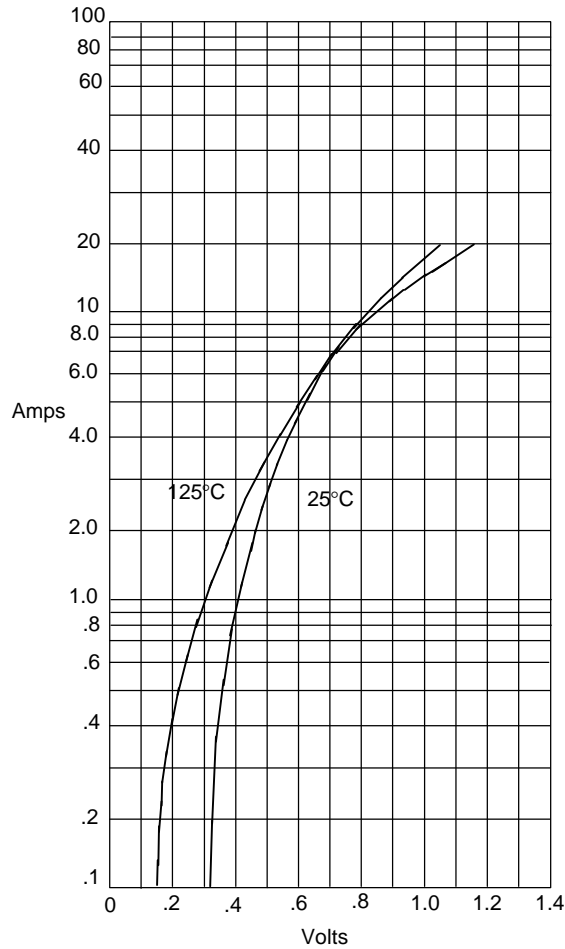
## SUGGESTED SOLDER PAD LAYOUT



\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

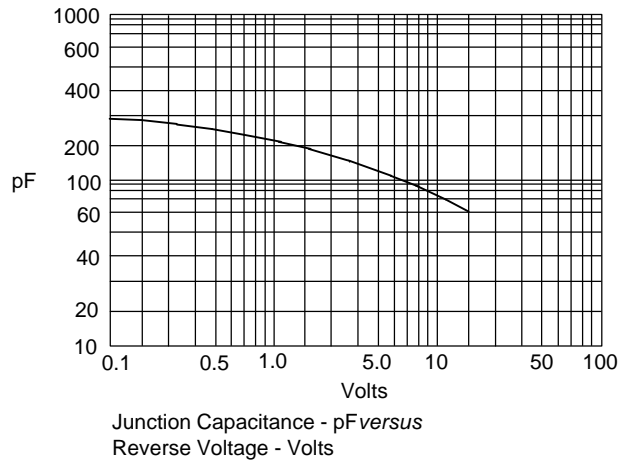
# DL5817

Figure 1  
Typical Forward Characteristics



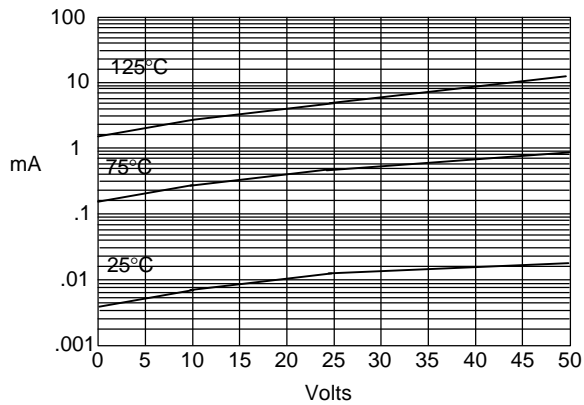
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

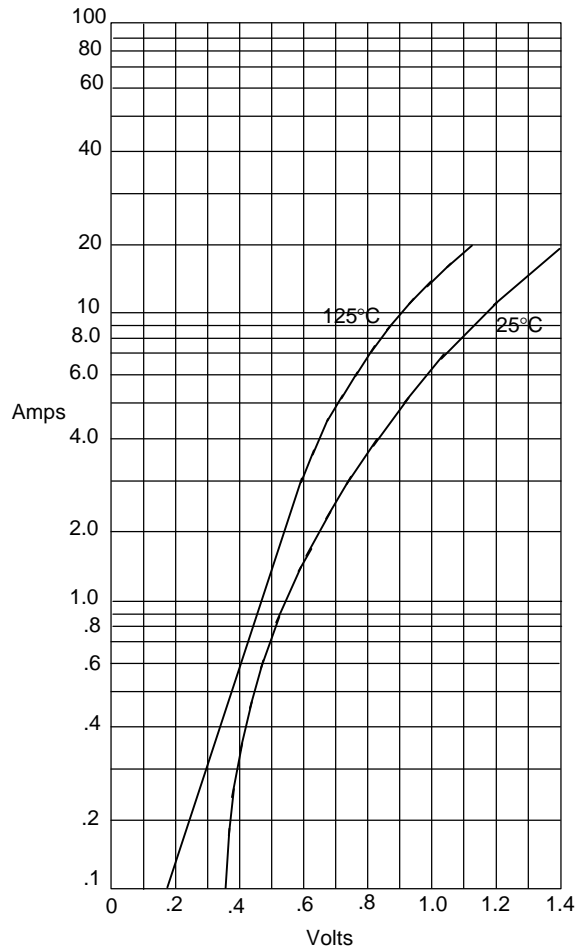
Figure 3  
Typical Reverse Characteristics



Typical Reverse Current - mA versus  
Reverse Voltage - Volts

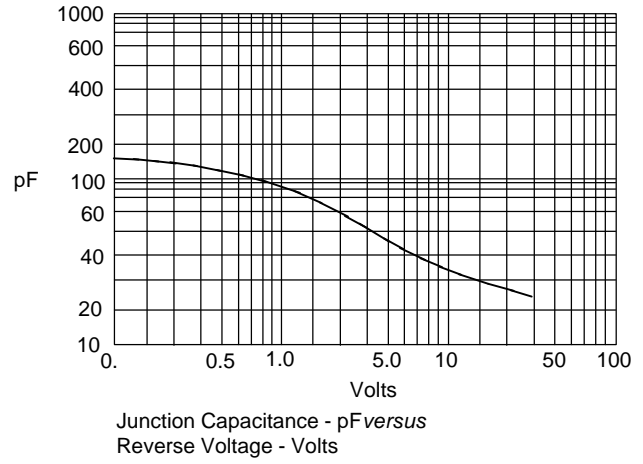
# DL5818 & DL5819

Figure 1  
Typical Forward Characteristics



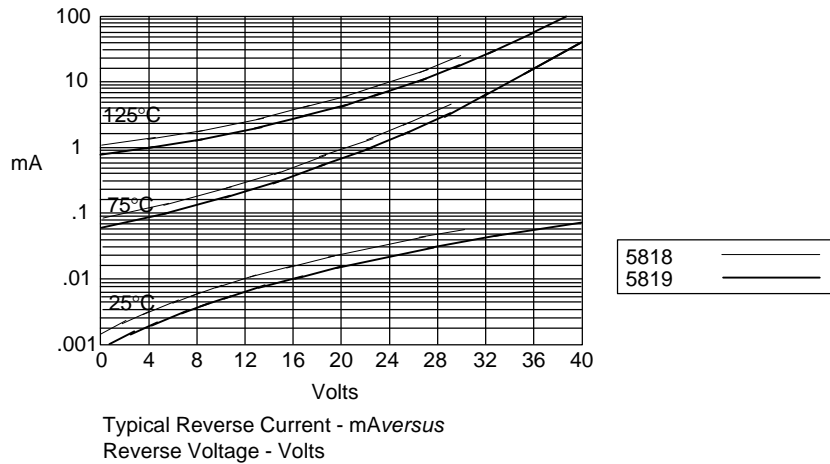
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

Figure 3  
Typical Reverse Characteristics



Typical Reverse Current - mA versus  
Reverse Voltage - Volts