

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

# **Features**

- Halogen free available upon request by adding suffix "-HF"
- Guard Ring Protection
- Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters
- Power Dissipation:250mW
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

# **Maximum Ratings**

- Operating Temperature: -65°C to +125°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 500°C/W Junction To Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B5817W	SJ	20V	14V	20V
B5818W	SK	30V	21V	30V
B5819W	SL	40V	28V	40V

## Electrical Characteristics $@25^\circ$ C Unless Otherwise Specified

Average Forward Current		I <sub>F(AV)</sub>	1.0A	T <sub>c</sub> = 90°C
Peak Forward Surge Current		I <sub>FSM</sub>	10A	8.3ms, half sine
Maximum Instantaneous Forward Voltage B5817W B5818W B5819W		V <sub>F</sub>	0.45V 0.55V 0.60V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25℃ (Note 1)
		ν <sub>F</sub>	0.75V 0.875V 0.90V	I <sub>FM</sub> = 3A; T <sub>J</sub> = 25℃(Note 1)
Reverse leakage				
current B58	817W	I <sub>R</sub>	200µА(Мах) 30µА(Тур.)	<b>VR=20V,Ta=25</b> ℃
B58	318W		40µА(Мах) 4µА(Тур.)	<b>VR=30V,Ta=25</b> ℃
B58	319W		40µА(Мах) 7µА(Тур.)	VR=40V,Ta=25 <sup>°</sup> C
Typical junction capacitance		CJ	120pF	Measured at 1.0MHz , V <sub>R</sub> =4.0V

	DIMENSIONS					
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX		
А	.140	.152	3.55	3.85		
В	.100	.112	2.55	2.85		
С	.055	.071	1.40	1.80		
D		.053		1.35		
E	.012	.031	0.30	.78		
G	.006		0.15			
Н		.01		.25		
J		.006		.15		

D

**B5817W** 

**B5819W** 

**1 Amp Schottky** 

**Barrier Rectifier** 

20 - 40 Volts

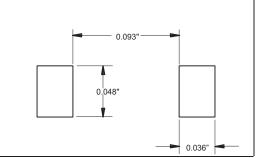
**SOD-123** 

A B

G

С

Thru



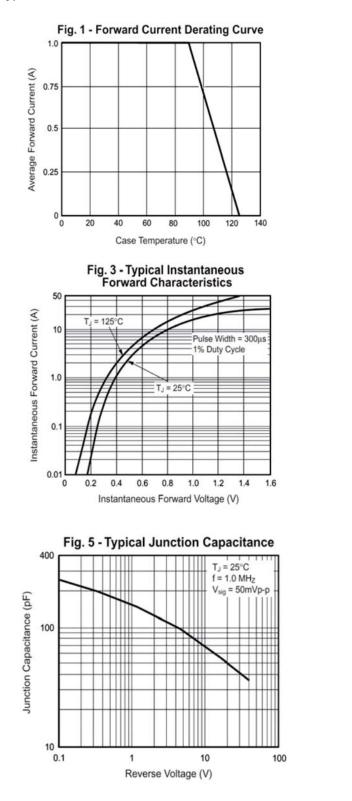
Notes: 1. Pulse Test: Pulse Width 300usec, Duty Cycle 2%

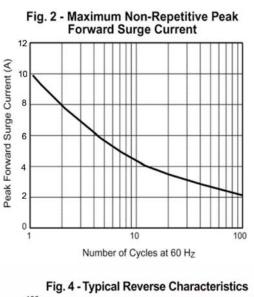
# www.mccsemi.com

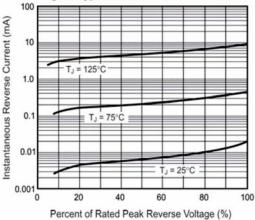


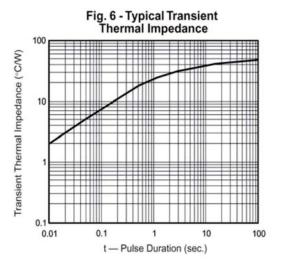
## B5817W-B5819W

#### **Typical Characteristics**









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## **Ordering Information :**

Device	Packing	
Part Number-TP	Tape&Reel: 3Kpcs/Reel	

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