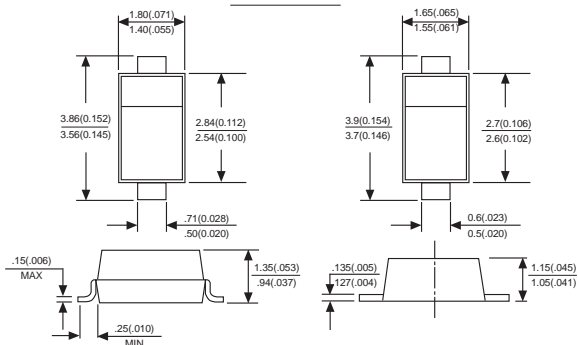


# B5817W THRU B5819W

## SCHOTTKY DIODE

### SOD-123



Dimensions in millimeters and (inches)

### FEATURES

- ◆ For use in low voltage, high frequency inverters
- ◆ Free wheeling, and polarity protection applications

### MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Marking:** B5817W:SJ, B5818W:SK, B5819W:SL

Maximum ratings and electrical characteristics, Single diode @ $T_A=25^\circ\text{C}$

PARAMETER	SYMBOLS	B5817W	B5818W	B5819W	UNITS
Peak repetitive peak reverse voltage	$V_{RRM}$				
Working peak reverse voltage	$V_{RWM}$	20	30	40	V
DC Blocking voltage	$V_R$				
RMS Reverse voltage	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	$I_o$		1		A
Peak forward surge current @=8.3ms	$I_{FSM}$		9		A
Power dissipation	$P_d$		250		mW
Thermal resistance junction to ambient	$R_{\theta JA}$		500		K/W
Storage temperature	$T_{STG}$		-65 to +150		$^\circ\text{C}$
Non-Repetitive peak reverse voltage	$V_{RM}$	20	30	40	V

Electrical ratings @ $T_A=25^\circ\text{C}$

PARAMETER	SYMBOLS	Min.	Max.	Unit	Test conditions	
Reverse breakdown voltage	$V_{(BR)}$	20		V	$I_R=1\text{mA}$	B5817W
		30		V		B5818W
		40		V		B5819W
Reverse voltage leakage current	$I_R$		1	mA	$V_R=20\text{V}$	B5817W
					$V_R=30\text{V}$	B5818W
					$V_R=40\text{V}$	B5819W
Forward voltage	$V_F$		0.45 0.75	V	$I_F=1\text{A}$ $I_F=3\text{A}$	B5817W
			0.55 0.875	V		B5818W
			0.6 0.9	V		B5819W
Diode capacitance	$C_D$		120	pF	$V_R=4\text{V}, f=1.0\text{MHz}$	

# RATINGS AND CHARACTERISTIC CURVES B5817W THRU B5819W

FIG. 1- FORWARD CURRENT DERATING CURVE

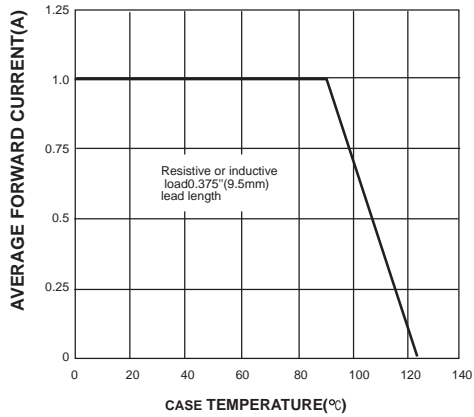


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

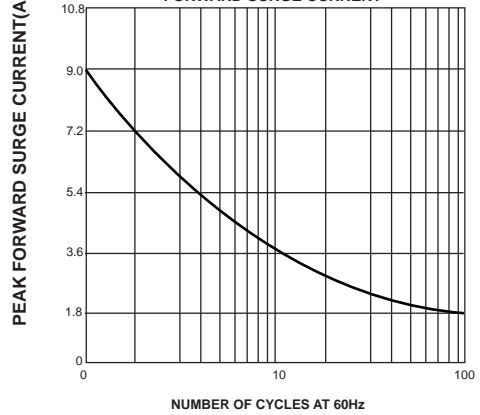


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

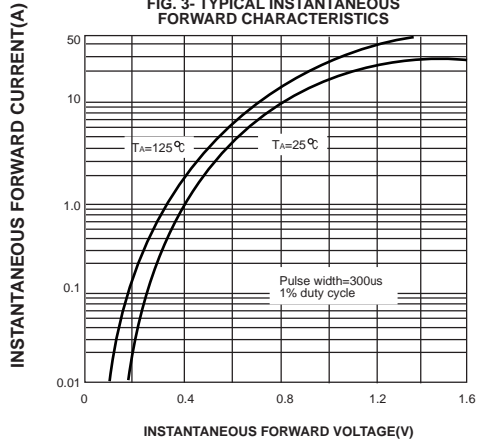


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

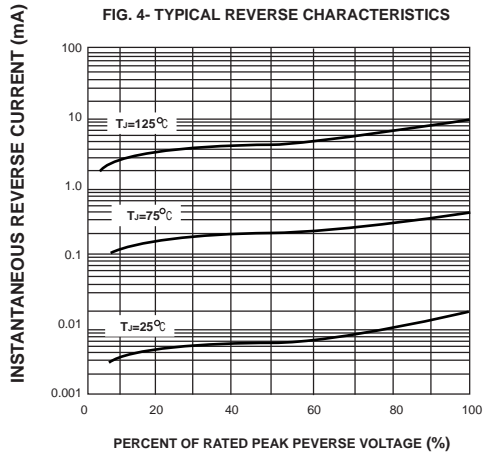


FIG. 5- TYPICAL JUNCTION CAPACITANCE

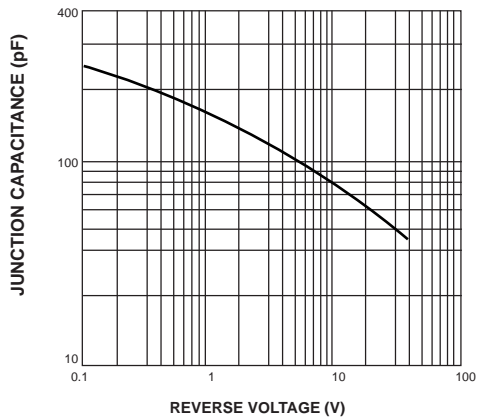
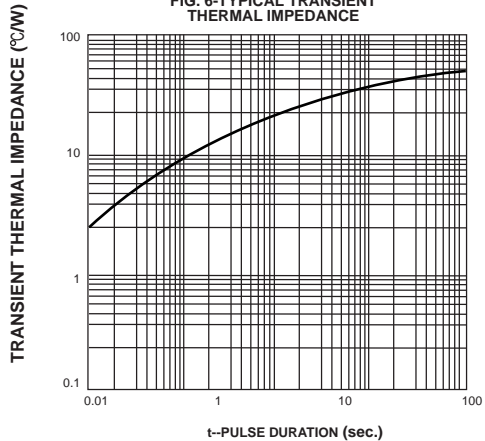


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

*Click to view products by [Starsea](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [GS1JE-TP](#) [RB160M-50TR](#) [BAS 3010S-02LRH E6327](#)  
[BAT 54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#)  
[SBAT54CWT1G](#) [SBM30-03-TR-E](#) [SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#)  
[MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [BAS 70-02L E6327](#) [DMJ3940-000](#) [SB007-03C-TB-E](#) [SB10015M-TL-E](#) [SB1003M3-TL-E](#) [SK32A-](#)  
[TP](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#) [SK38B-TP](#) [NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#)  
[ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA140-HF](#) [ACDBA2100-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [BAT54-](#)  
[13-F](#) [ACDBA340-HF](#) [ACDBA260LR-HF](#)