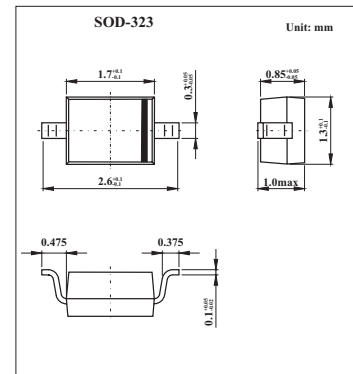


Schottky Barrier Diodes

1N5817WS-1N5819WS

■ Features

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



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	1N5817WS	1N5818WS	1N5819WS	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	20	30	40	V
Peak repetitive Peak reverse voltage	V _R RM				
Working Peak Reverse Voltage	V _R WM	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}		25		A
Repetitive Peak Forward Current	I _{FRM}		625		mA
Power Dissipation	P _d		250		mW
Thermal Resistance Junction to Ambient	R _θ JA		500		K/W
Storage temperature	T _{STG}		-65 to 150		°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Reverse breakdown voltage	1N5817WS	I _R = 1mA	20			V
	1N5818WS		30			
	1N5819WS		40			
Reverse voltage leakage current	1N5817WS	V _R =20V			1	mA
	1N5818WS	V _R =30V				
	1N5819WS	V _R =40V				
Forward voltage	1N5817WS	I _F =1A			0.45	V
		I _F =3A			0.75	
	1N5818WS	I _F =1A			0.55	V
		I _F =3A			0.875	
	1N5819WS	I _F =1A			0.6	V
		I _F =3A			0.9	
Diode capacitance	C _D	V _R =4V, f=1MHz			120	pF

■ Marking

NO.	1N5817WS	1N5818WS	1N5819WS
Marking	SJ	SK	SL

1N5817WS-1N5819WS

■ Typical Characteristics

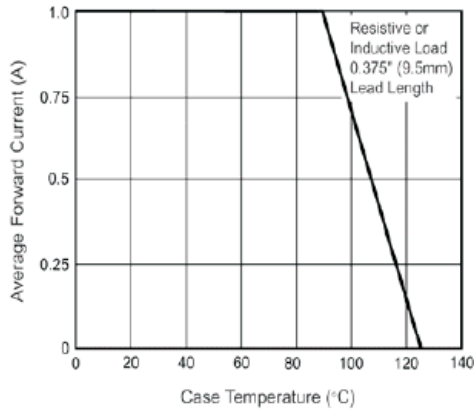


Fig.1 Forward Current Derating Curve

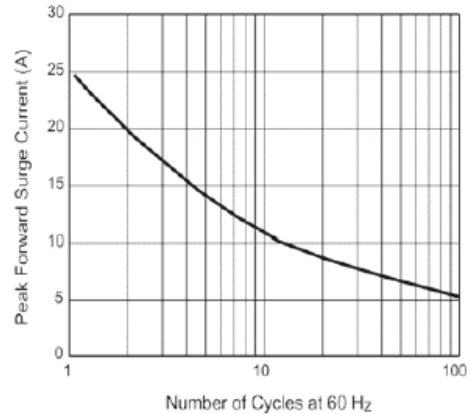


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

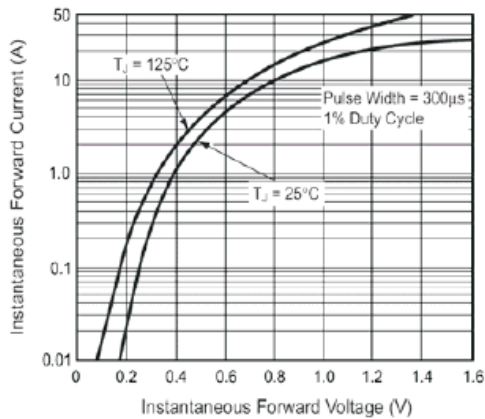


Fig.3 Typical Instantaneous Forward Characteristics

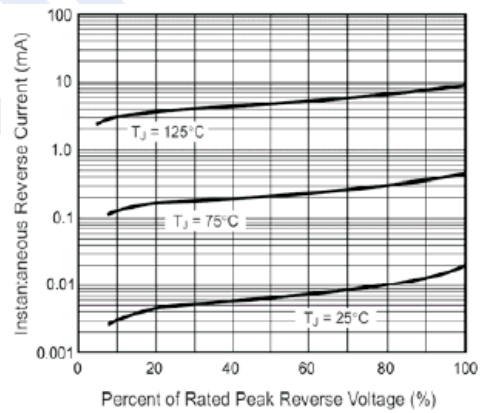


Fig.4 Typical Reverse Characteristics

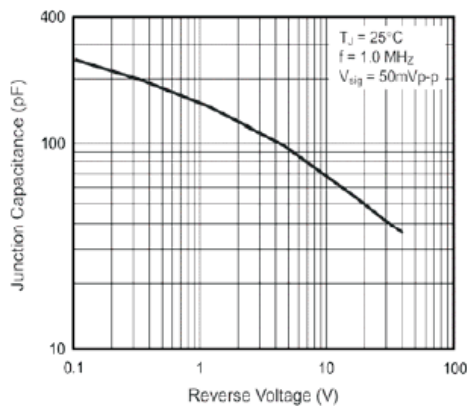


Fig.5 Typical Junction Capacitance

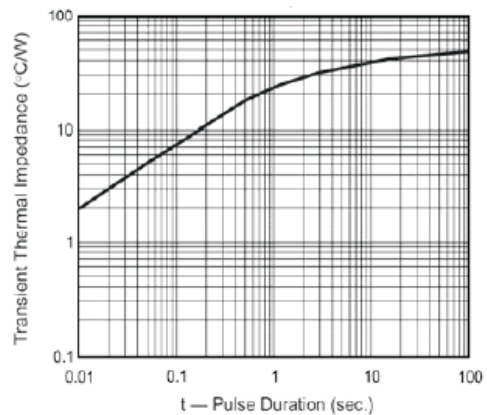


Fig.6 Typical Transient Thermal Impedance