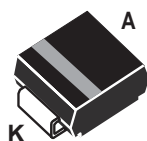


Schottky Barrier Rectifier

SS58B

SMB



Cathode  **Anode**

Features

- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

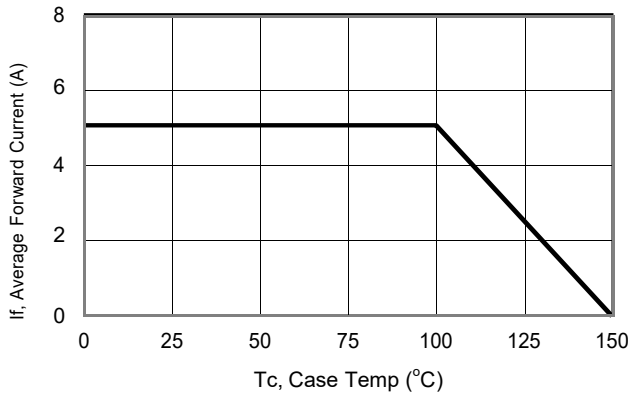
Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

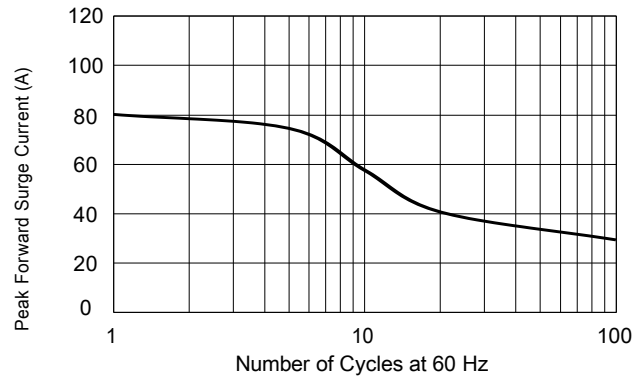
Maximum ratings and electrical characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	80		V
Maximum average forward rectified current			IF(AV)	5		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load			IFSM	80		A
Operating junction and storage temperature range			T_J, T_{STG}	-50 to +150		$^\circ\text{C}$
Typical thermal resistance			$R_{\theta JA}$	150		$^\circ\text{C/W}$
Instantaneous forward voltage			VF	TYP.	MAX.	V
	IF=1A	TJ=25 $^\circ\text{C}$		0.45	0.50	
	IF=1A	TJ=125 $^\circ\text{C}$		0.38	-	
	IF=5A	TJ=25 $^\circ\text{C}$		0.65	0.70	
	IF=5A	TJ=125 $^\circ\text{C}$		0.58	-	
Instantaneous reverse current at rated reverse voltage		TJ=25 $^\circ\text{C}$	IR	5	100	μA
		TJ=125 $^\circ\text{C}$		10	-	mA

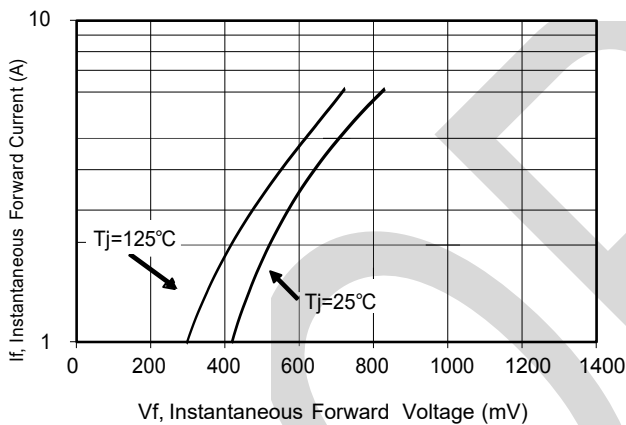
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



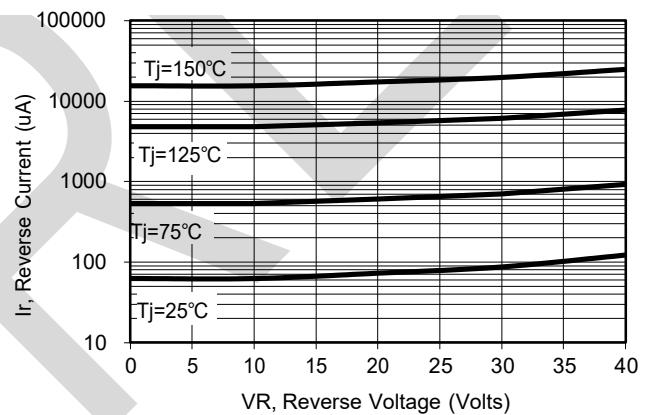
Current Derating, Case



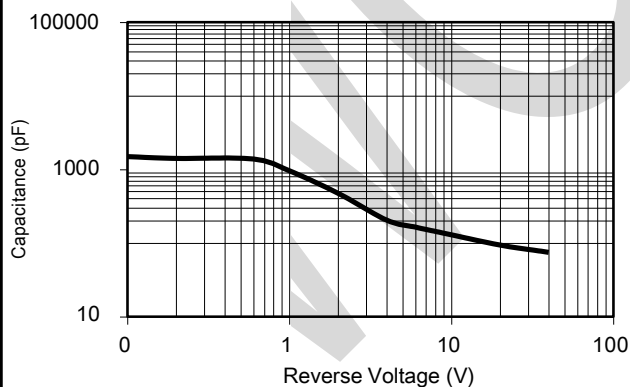
Maximum Repetitive Surge Current



Typical Forward Voltage



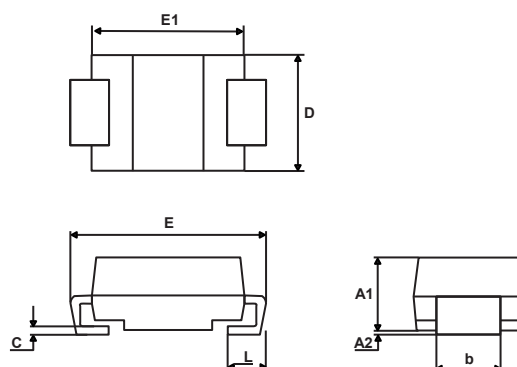
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

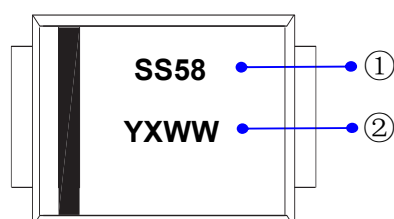
SMB dimension definitions



SMB dimension values

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A1	1.90	2.45	0.075	0.096
A2	0.05	0.20	0.002	0.008
b	1.95	2.20	0.077	0.087
c	0.15	0.40	0.006	0.016
D	3.30	3.95	0.130	0.156
E	5.10	5.60	0.201	0.220
E1	4.05	4.60	0.159	0.181
L	0.75	1.50	0.030	0.059

Marking Information



①Product model : SS58

②PDC information:

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)

NO COPY