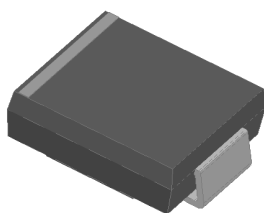


SCHOTTKY BARRIER RECTIFIER

DO-214AB (SMC)

SS510C



Cathode  Anode

Marking:SS510

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°C unless otherwise noted)

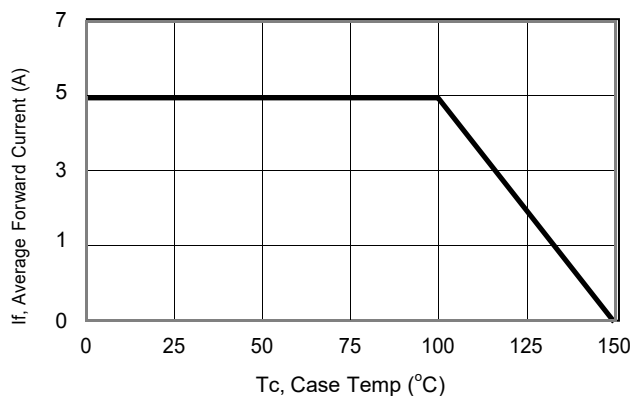
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	100		V
Maximum average forward rectified current			IF(AV)	5		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load			IFSM	150		A
Operating junction and storage temperature range			TJ, TSTG	-50 to +150		°C
Typical thermal resistance			RθJA	50		°C/W
Instantaneous forward voltage			VF(1)	TYP.	MAX.	V
	IF=5A	TJ=25°C		0.80	0.85	
	IF=5A	TJ=125°C		0.72	-	
Instantaneous reverse current at rated reverse voltage		TJ=25°C	IR(2)	5	80	μA
		TJ=125°C		10	-	mA

Notes:

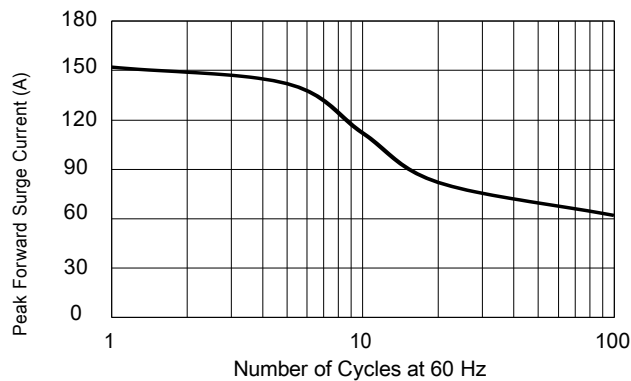
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

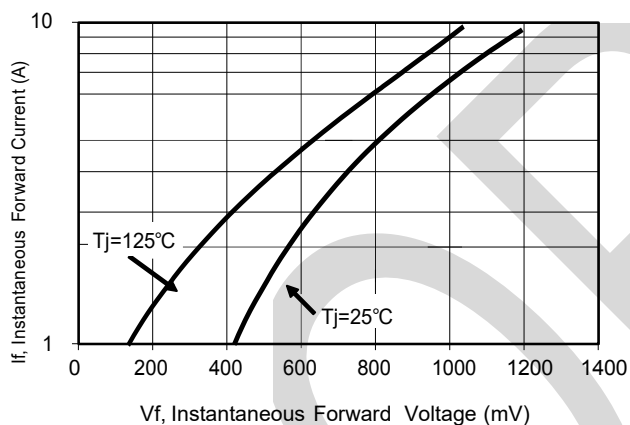
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



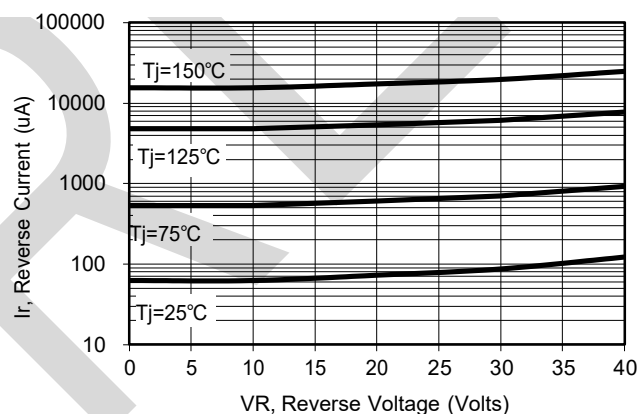
Current Derating, Case



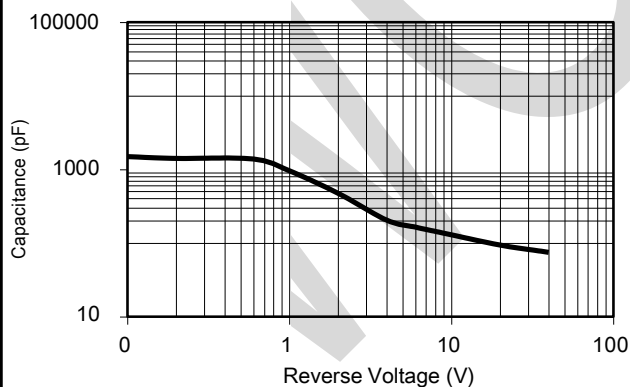
Maximum Repetitive Surge Current



Typical Forward Voltage



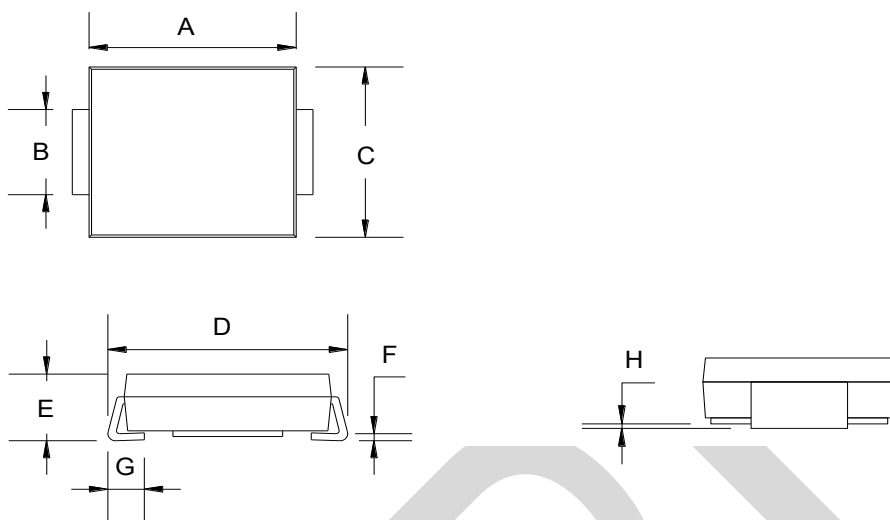
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

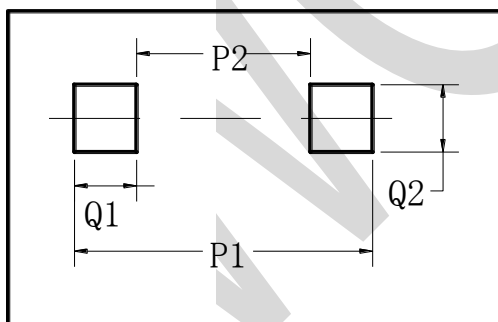
DO-214AB(SMC)



SMC Mechanical Data

UNIT		A	B	C	D	E	F	G	H
mm	max	7.1	3.3	6.25	8.1	2.6	0.30	1.5	0.2
	min	6.6	2.8	5.6	7.7	2.0	0.15	0.75	0.1
mil	max	279.5	129.9	246.1	318.9	102.3	11.8	59.1	7.87
	min	259.8	110.2	220.5	303.1	78.7	5.90	29.5	3.93

SMC Suggested Pad Layout



UNIT		P1	P2	Q1	Q2
mm	Typ	9.9	3.85	3.0	3.8
mil	Typ	389.7	151.5	118.1	149.6