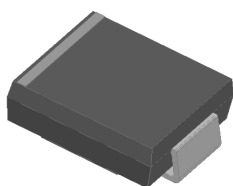


Schottky Barrier Rectifier

SS56C

SMC



Cathode  Anode

Features

- Guardring for overvoltage protection
- Low power losses
- Extremely fast switching
- High forward surge capability
- High frequency operation

Applications

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

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

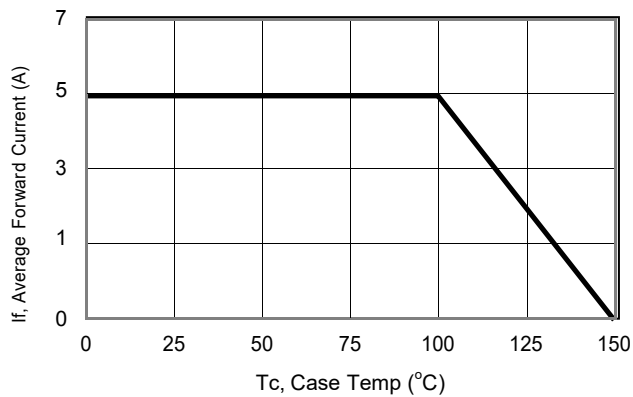
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	60		V
Maximum average forward rectified current			IF(AV)	5		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode			IFSM	100		A
Operating junction and storage temperature range			TJ, TSTG	-55 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)			RθJA	47		°C/W
Instantaneous forward voltage			VF(1)	TYP.	MAX.	V
	IF=1A	TJ=25°C		0.44	0.48	
	IF=1A	TJ=125°C		0.42	-	
	IF=5A	TJ=25°C		0.68	0.70	
	IF=5A	TJ=125°C		0.62	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	-	200	uA
		TJ=125°C		2	20	mA

Notes:

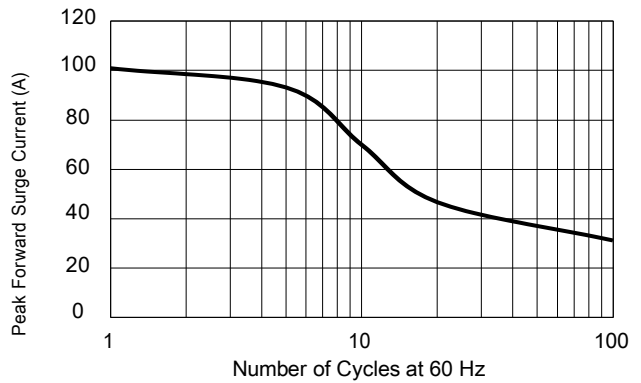
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

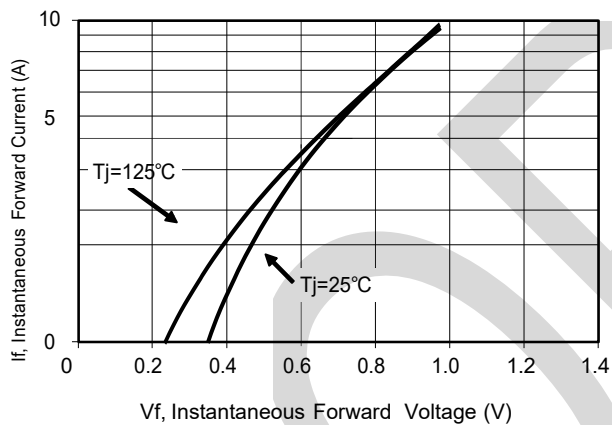
RATINGS AND CHARACTERISTICS CURVES



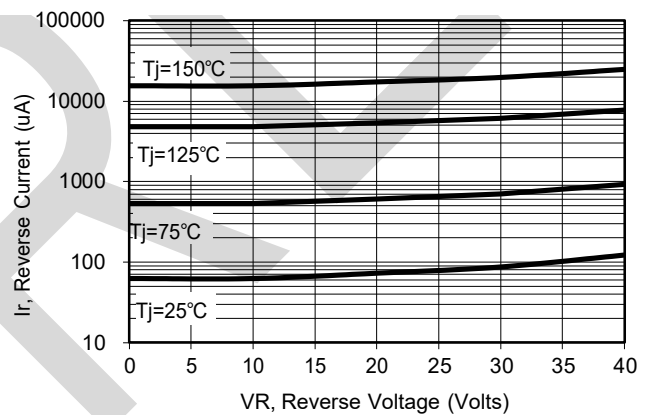
Current Derating, Case



Maximum Repetitive Surge Current



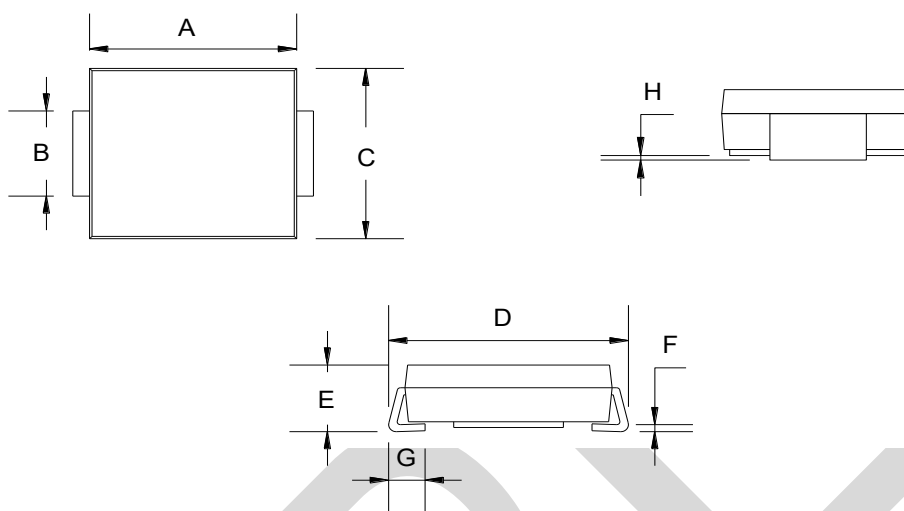
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE

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

Marking Information



①Product model :SS56C Referred to as SS56

②PDC information :

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)