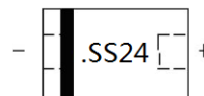


SS24
2A, Schottky Barrier Diode
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
Features

- Schottky barrier rectifier
- Guarding protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance
- Standard products are Pb-free and Halogen-free


SMA(DO-214AC)


.SS24= Device code
Pin configuration and Marking

MECHANICAL DATA

- Case: SMA molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: ANY

Order information

Device	Package	Shipping
SS24	SMA (DO-214AC)	5000/Tape&Reel

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RWS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current at T_L (Fig.2)	$I_{F(AV)}$	2.0	A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40	A
Operating temperature range	T_J	-55 ~ 125	°C
Storage temperature range	T_{STG}	-55 ~ 150	°C

Thermal Characteristics

Parameter	Symbol	Value	Unit
Maximum thermal resistance (Junction to Lead)(Fig.2)	$R_{\theta JL}$	28	°C/W

Electronics characteristics ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Maximum instantaneous forward voltage @ $I_F=2.0\text{A}^*$	V_F	0.66	V
Maximum reverse current @ V_{DC} ($T_J=25^{\circ}\text{C}$)	I_R	0.2	mA
Maximum reverse current @ V_{DC} ($T_J=100^{\circ}\text{C}$)	I_R	6	mA

*: Pulse test, Pulse width 380us, duty cycle 1%

Typical characteristics ($T_a=25^{\circ}\text{C}$, unless otherwise noted)

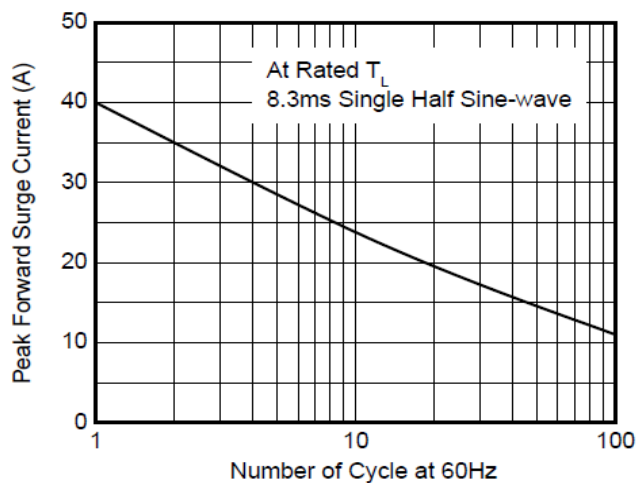


Fig.1: Peak Forward Surge Current

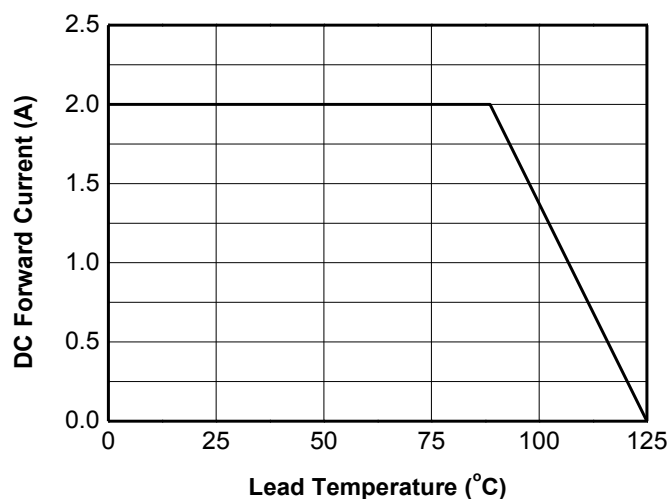


Fig.2: Forward current Derating Curve

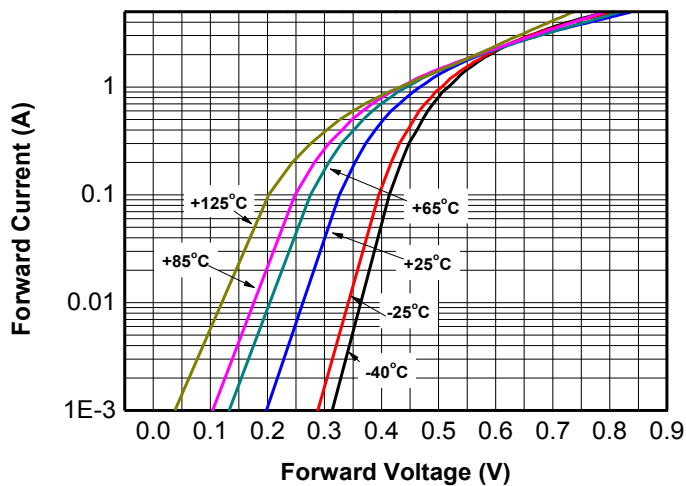


Fig.3: Typical Forward Characteristics

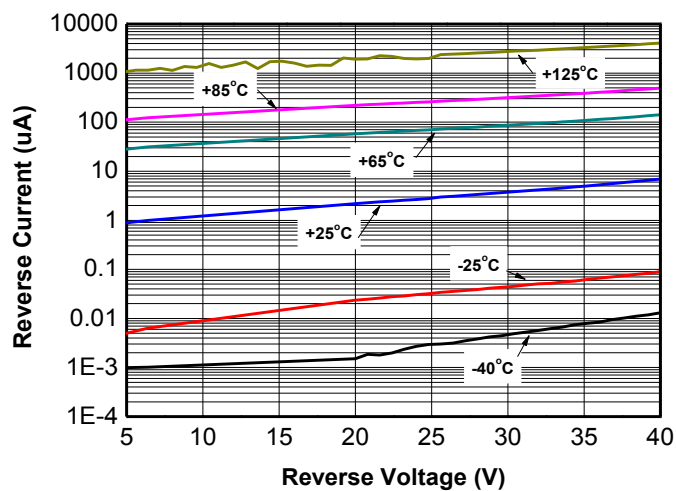


Fig.4: Typical Reverse Characteristics

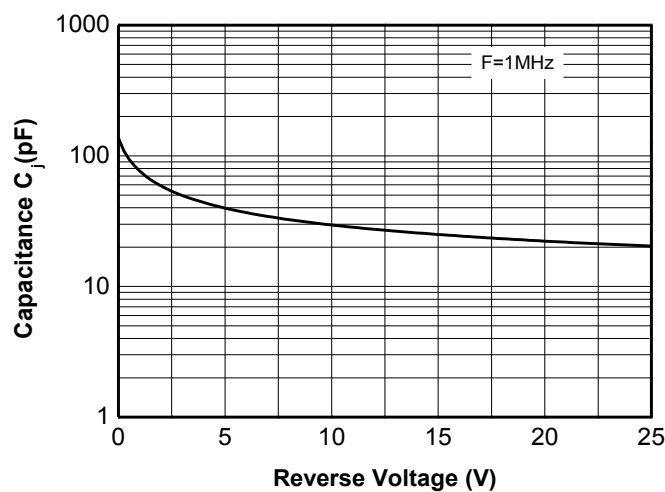
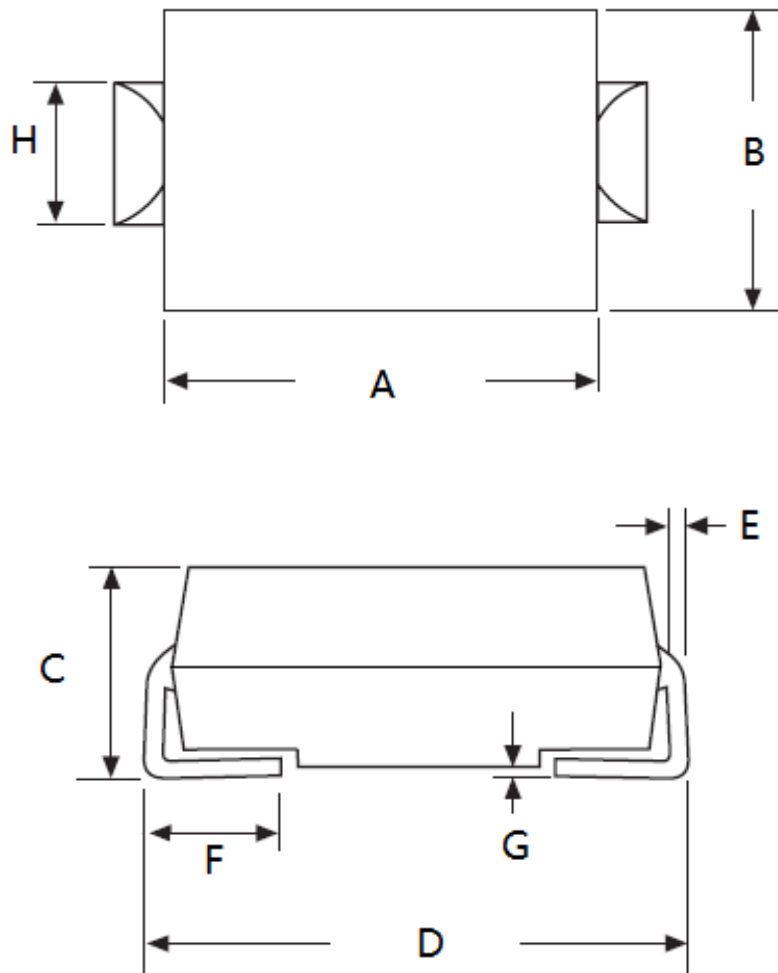


Fig.5: Junction capacitance vs. Reverse voltage

Package outline dimensions
SMA (DO-214AC)


Symbol	Dimensions in millimeter	
	Min.	Max.
A	3.90	4.40
B	2.45	2.75
C	1.90	2.40
D	4.85	5.25
E	0.152	0.305
F	0.76	1.52
G	0.203 Max.	
H	1.45	1.95