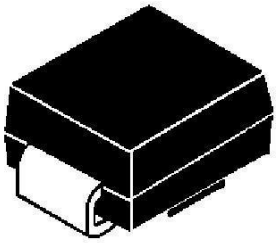
Schottky rectifier

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering： 260℃/10 seconds at terminals
- Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC



SMA (DO-214 AC)

Mechanical Date

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end

Major Ratings and Characteristics

$I_{F(AV)}$	1.0 A
V_{RRM}	20 V to 200 V
I_{FSM}	40 A
V_F	0.50V, 0.55V, 0.70V, 0.85V，0.95V
Tj max.	125 °C

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Items	Symbol	SS12A	SS13A	SS14A	SS15A	SS16A	SS18A	SS110A	SS115A	SS120A	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	1									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	40									A
Voltage rate of change(rated VR)	dv/dt	10000									V/μs
Thermal resistance from junction to lead	$R_{\theta JL}$	35									℃/W
Operating junction and storage temperature range	T_J, T_{STG}	–65 to +125									℃

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Items	Test conditions		Symbol	SS12A	SS13A ~14A	SS15A ~16A	SS18A ~110A	SS115A ~120A	UNIT
Instantaneous forward voltage	I_F=1.0A		V_F	0.50	0.55	0.70	0.85	0.95	V
Reverse current	V_R=V_{DC}	Tj=25℃	I_R	0.5					mA
		Tj=100℃		5.0					

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig 1.Forward Current Derating Curve

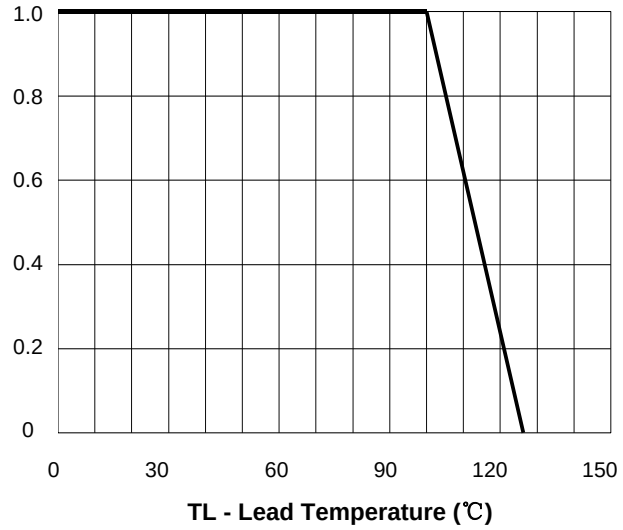


Fig 2.Maximum Non-Repetitive Peak Forward Surge Current

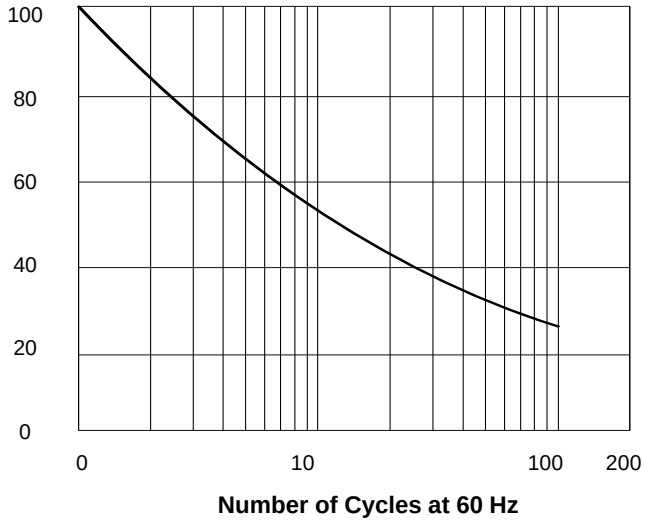


Fig 3.Typical Instantaneous Forward

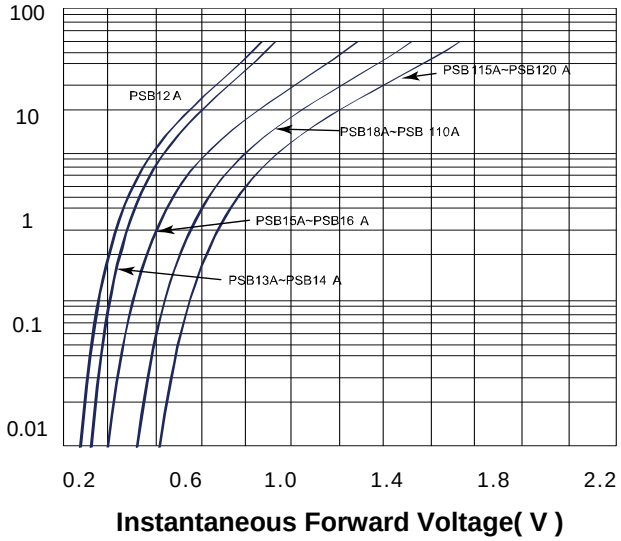
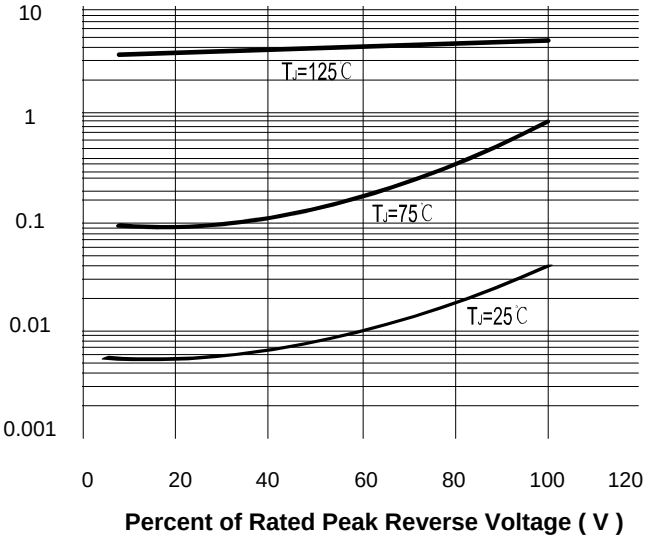
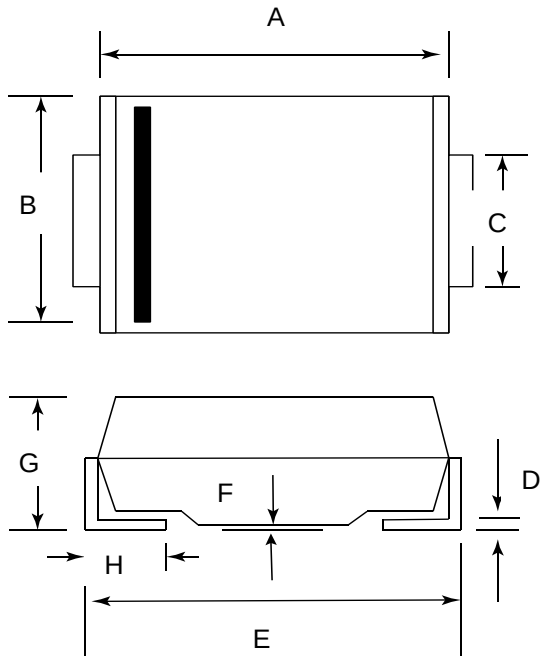


Fig 4.Typical Reverse Leakage Characteristics



SMA Package Outline Dimensions



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	3.99	4.50	0.157	0.177
B	2.54	2.79	0.100	0.110
C	1.25	1.65	0.049	0.065
D	0.152	0.305	0.006	0.012
E	4.93	5.28	0.194	0.208
F	----	0.203	----	0.008
G	1.98	2.29	0.078	0.090
H	0.76	1.52	0.030	0.060