

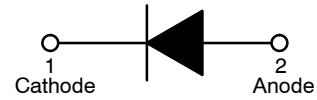


THE DATASHEET OF SSA36



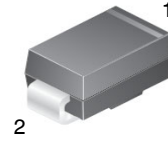
Surface Mount Schottky Barrier Rectifier

SSA36



Features

- UL Flammability 94V-0 Classification
- MSL 1
- Green Mold Compound
- These Devices are Pb-Free and are RoHS Compliant



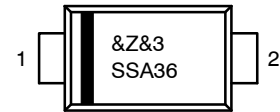
SMA
CASE 403AE

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Recurrent Peak Reverse Voltage	60	V
V _{RMS}	RMS Reverse Voltage	42	V
V _{DC}	DC Blocking Voltage	60	V
I _{F(AV)}	Average Rectified Current at T _L = 75°C	3	A
I _{FSM}	Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	80	A
T _J	Operating Junction Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

MARKING DIAGRAM



Color Band Denotes Cathode

- &Z = Assembly Plant Code
- &3 = 3-Digit Date code format (Year & Week)
- SSA36 = Specific Device Code

ORDERING INFORMATION

Device	Package	Shipping†
SSA36	SMA (Pb-Free, Halide Free)	7500 / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, [BRD8011/D](#).

THERMAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
Ψ _{JL}	Junction-to-Lead Thermal Characteristics (Note 2)	30	°C/W
R _{θJA}	Typical Thermal Resistance, Junction-to-Ambient	180	°C/W

1. Per JESD51-3 recommended thermal test board. Device mounted on FR-4 PCB, board size = 76.2 mm x 114.3 mm.
2. Thermocouple soldered at cathode lead.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V _F	Forward Voltage (Note 3)	I _F = 3.0 A	-	-	0.75	V
I _R	DC Reverse Current	V _R = 60 V	-	-	0.1	mA
		V _R = 60 V, T _A = 100°C	-	-	20	
T _{rr}	Reverse Recovery Time	I _F = 0.5 A, I _R = 1 A, I _{rr} = 0.25 A	-	10.74	-	ns

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

3. Pulse test with Pulse width = 300 μs, 1% duty cycle.

TYPICAL PERFORMANCE CHARACTERISTICS

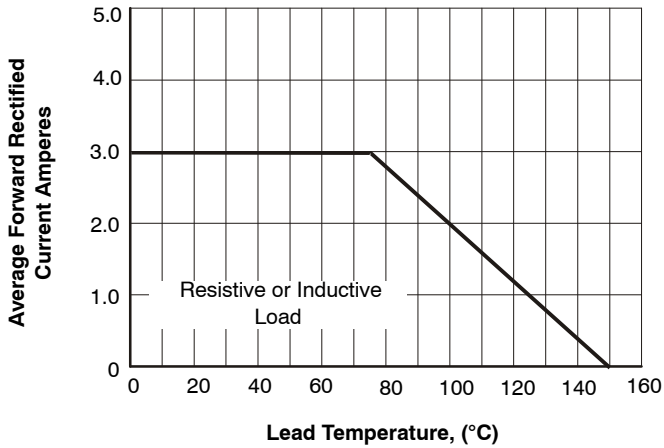


Figure 1. Forward Current Derating Curve

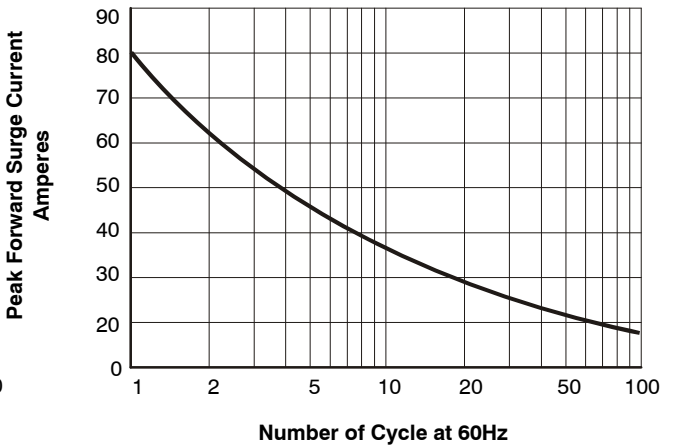


Figure 2. Maximum Non-Repetitive Surge Current

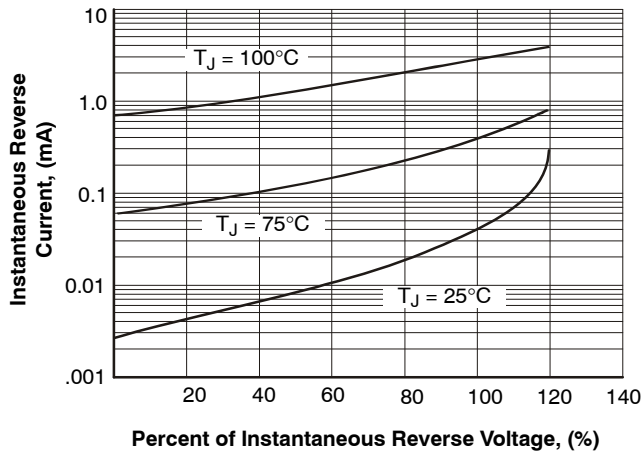


Figure 3. Typical Reverse Characteristic

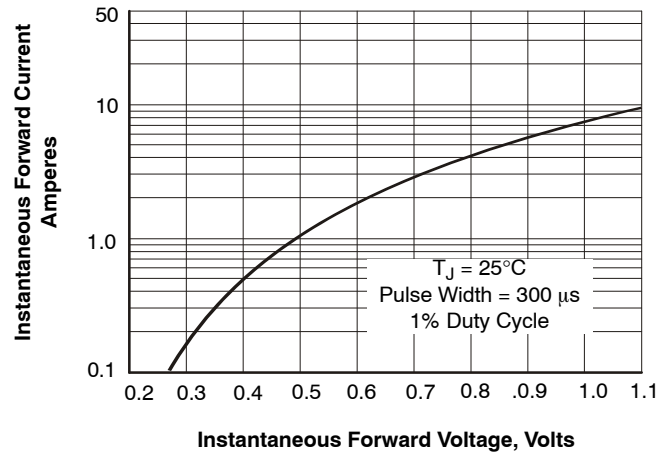


Figure 4. Typical Instantaneous Forward Characteristics

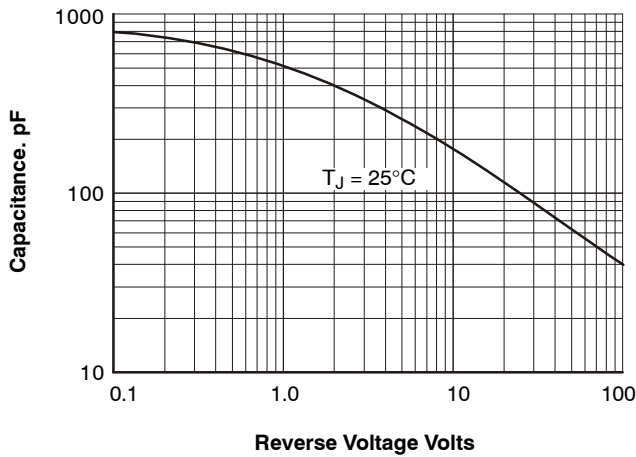


Figure 5. Typical Junction Capacitance

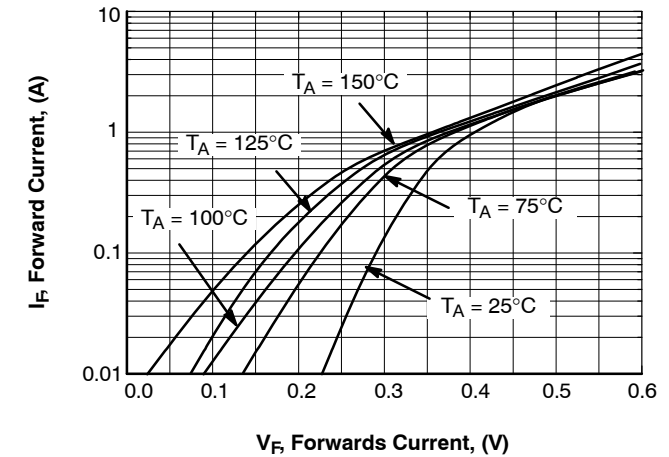


Figure 6. Typical Forward Characteristics

MECHANICAL CASE OUTLINE

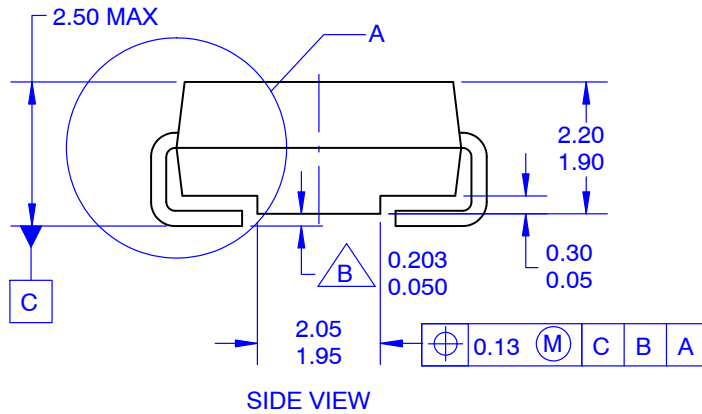
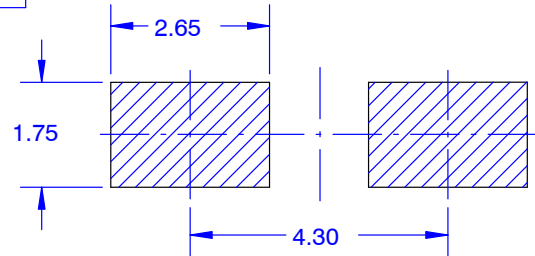
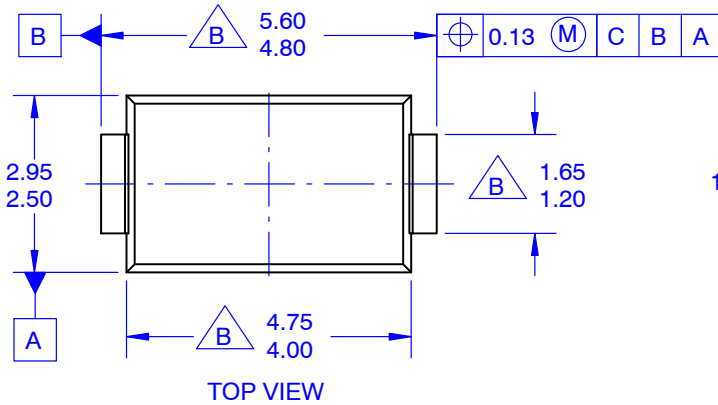
PACKAGE DIMENSIONS

ON Semiconductor®



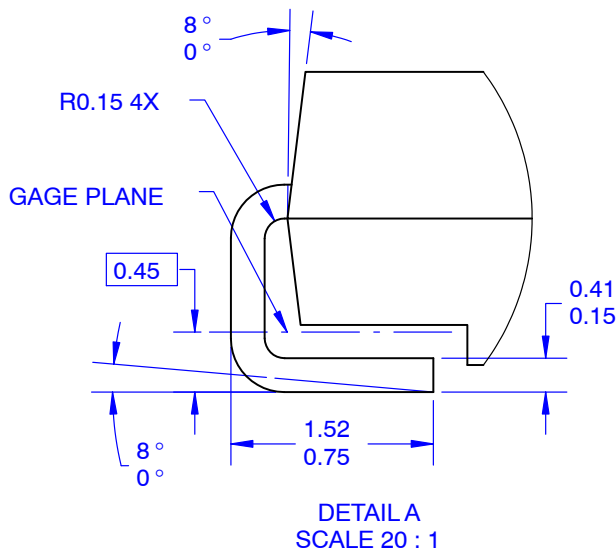
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DATE 31 AUG 2016



NOTES:

- A. EXCEPT WHERE NOTED, CONFORMS TO JEDEC DO214 VARIATION AC.
- B. DOES NOT COMPLY JEDEC STANDARD VALUE.
- C. ALL DIMENSIONS ARE IN MILLIMETERS.
- D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
- E. DIMENSIONS AND TOLERANCE AS PER ASME Y14.5-2009.
- E. LAND PATTERN STD. DIOM5025X231M



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