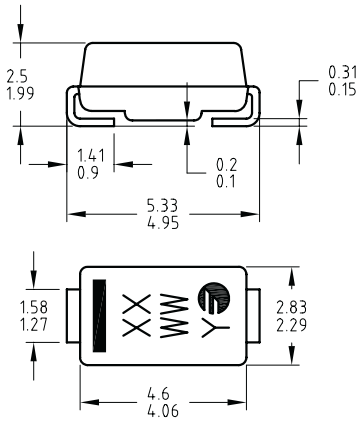
1.0 Amp. Surface Mount Low V_F Schottky Barrier Rectifiers

RoHS COMPLIANCE

CASE:
SMA/DO-214AC



XX = Marking code
WW = Week code
Y = Year code

Dimensions in mm.

Voltage	**Current**
20 V to 40 V	1.0 A

- For surface mounted application
- Metal to silicon juction, majority carrier conduction
- Low forward voltage drop
- Easy pick and place
- High surge current capability
- Plastic material used carriers Underwraiters Laboratory Classification 94V-0
- Epitaxial construction
- High temperature soldering: 260 ºC / 10 seconds at terminals

MECHANICAL DATA

Case: Molded plastic
Terminals: Pure tin plated, lead free.
Polarity: Indicated by cathode band
Packaging: 12 mm tape per EIA-STD RS-481.
Weight: 0.064 gram

Maximum Ratings and Electrical Characteristics at 25 ºC

		FSSL12	**FSSL13**	**FSSL14**
Marking code		**1A**	**1B**	**1C**
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	20	30	40
V_{RMS}	Maximum RMS Voltage (V)	14	21	28
V_{DC}	Maximum DC Blocking Voltage (V)	20	30	40
$I_{F(AV)}$	Maximum Average Forward Rectified Current at T_L (See graphic)	1.0 A		
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	50 A		
T_j	Operating Temperature Range	-55°C to +125°C		
T_{stg}	Storage Temperature Range	-55°C to +150°C		

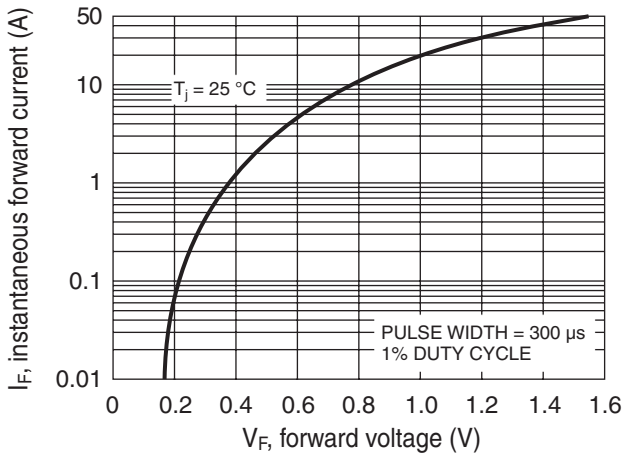
Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage (Note 1) @ 1.0 A	0.39 V
I_R	Maximum DC Reverse Current @ T_A = 25 °C	0.2 mA
	at Rated DC Blocking Voltage @ T_A =100°C	50 mA
$R_{th\ (j-l)}$ $R_{th\ (j-a)}$	Typical Thermal Resistance (Note 2)	28 °C/W 88 °C/W

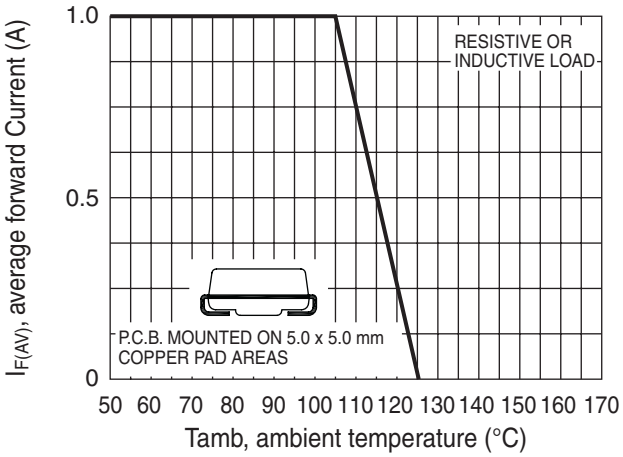
NOTES: 1. Pulse Test With PW = 300 µsec, 1% Duty Cycle
2. Measured on P.C. Board with 5mm x 5mm Copper Pad Areas.

Rating And Characteristic Curves

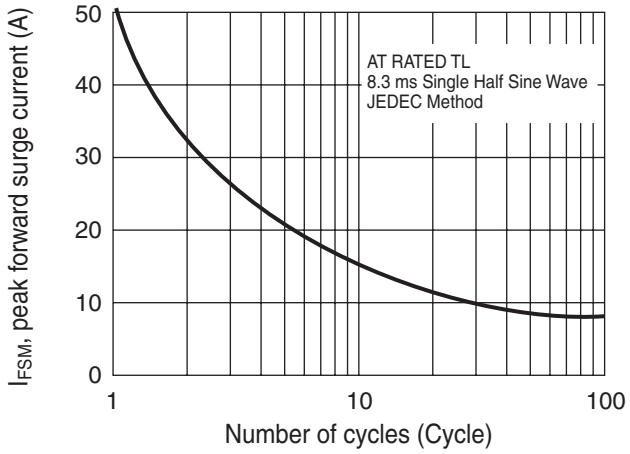
TYPICAL FORWARD CHARACTERISTIC



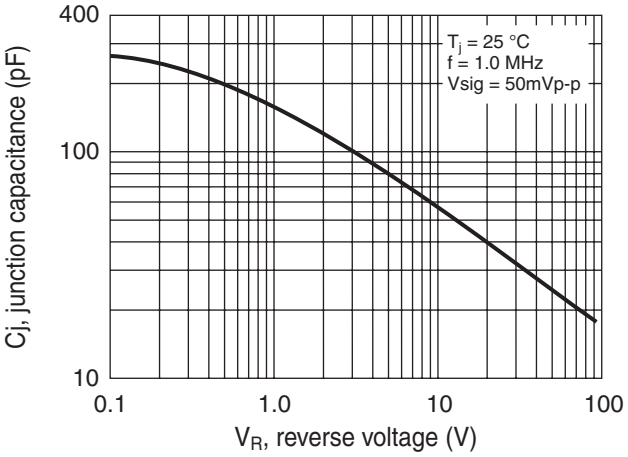
MAXIMUM FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTIC