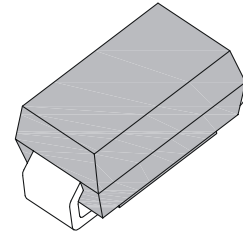


1.0A Surface Mount Schottky Barrier Rectifier

Features

- Low Profile in SMA Package
- Low power loss, high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250° C/10 seconds at terminals



**DO214AC
(SMA)**



Mechanical Data

Case:	JEDEC DO-214AC, Molded plastic body
Terminals:	Solder plated, solderable per MIL-STD-750, Method 2026
Polarity	Color band denotes the cathode end
Weight	0.002 Ounce, 0.064 gram

Maximum Ratings and Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted)

Symbols	Description	SMA5817	SMA5818	SMA5819	Unit
VRMS	Maximum RMS voltage	20	30	40	V
VRRM	Maximum repetitive peak reverse voltage	14	21	28	V
VDC	Maximum DC blocking voltage	20	30	40	V
I(AV)	Maximum average forward rectified current at $T_L = 90^{\circ}C$ (FIG.1)	1.0			A
IFSM	Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (Note1)	25			A
VF	Maximum instantaneous forward voltage at 1.0A (Note2)	0.45	0.55	0.60	V
IR	Maximum DC reverse current at rated DC blocking voltage @ $T_A = 25^{\circ}C$	1.0			mA
RθJA	Maximum thermal resistance, Junction to Ambient (Note3)	88.0			° C/W
RθJL	Maximum thermal resistance, Junction to Lead	28.0			° C/W
TJ	Operating junction temperature range	-65 to +125			° C
TSTG	Storage Temperature Range	-65 to +150			° C

1.0A Surface Mount Schottky Barrier Rectifier

SMA5817-SMA5819

- NOTES:**
1. 8.3ms single half sine-wave superimposed on rated load (JEDEC method)
 2. Pulse Test with PW = 300 μ sec, 1% Duty Cycle.
 3. Mounted on P.C Board with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

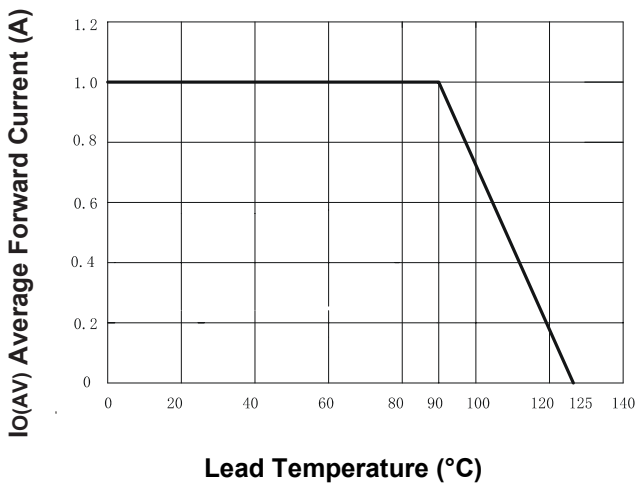


Fig.2- Maximum Non-repetitive Peak Forward Surge Current

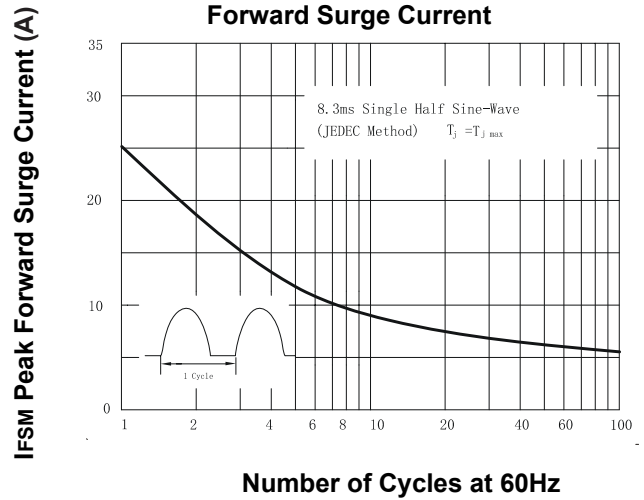


Fig.3- Typical Instantaneous Forward Characteristics

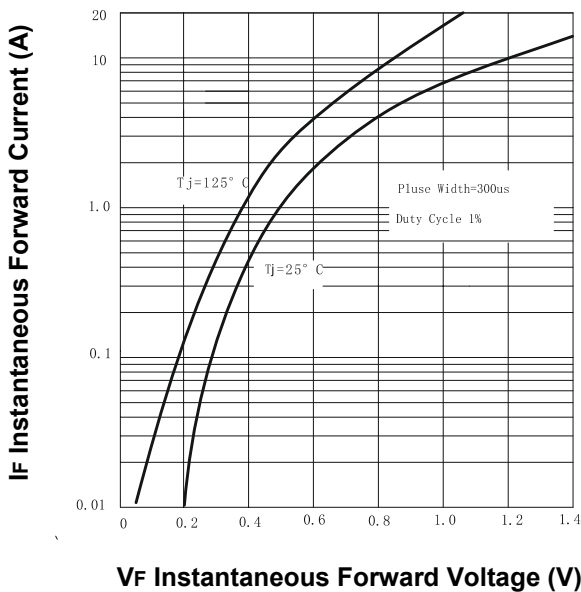
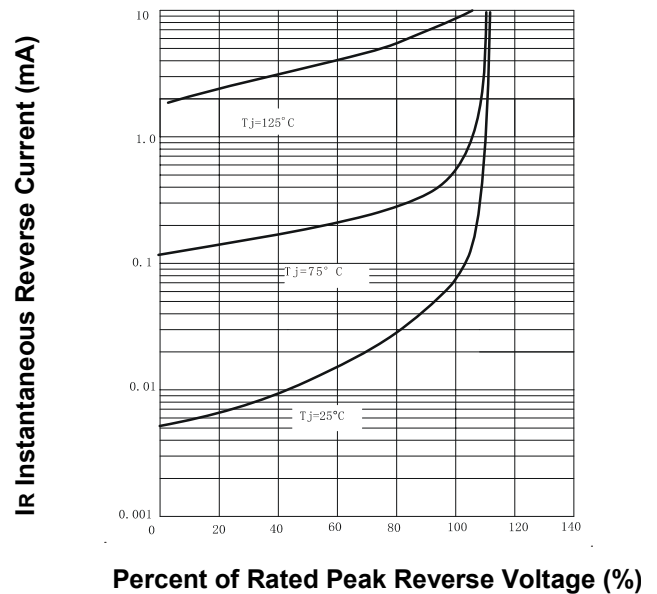


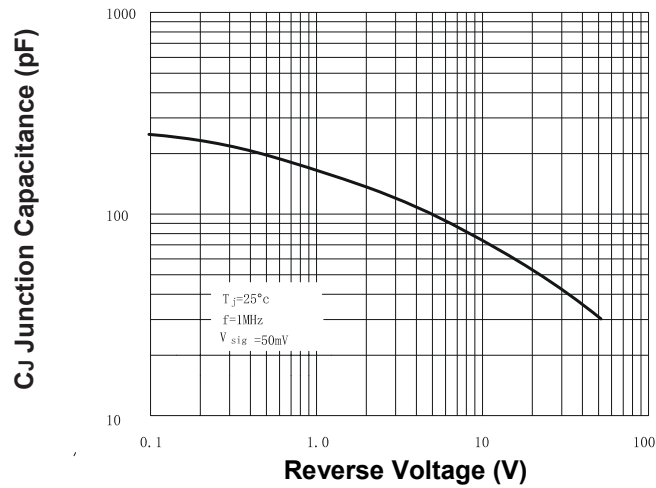
Fig.4- Typical Reverse Current Characteristics



1.0A Surface Mount Schottky Barrier Rectifier

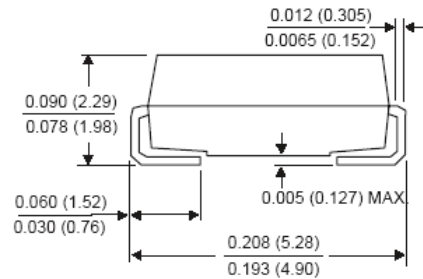
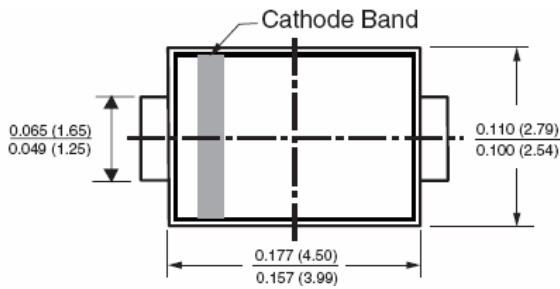
SMA5817-SMA5819

Fig.5-Typical junction capacitance



Dimensions in inches (mm)

DO214AC (SMA)



1.0A Surface Mount Schottky Barrier Rectifier

SMA5817-SMA5819

How to contact us

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.

42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

CROSS REGION PLAZA, 899 LINLING ROAD, SUITE 18C, SHANGHAI, 200030, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931