

S-SM340A

Schottky Barrier Rectifiers

Reverse Voltage 40V Forward Current 3.0A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * Guardring for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals
- * S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

Mechanical Data

Case: JEDEC DO-214AC,
molded plastic over glass body

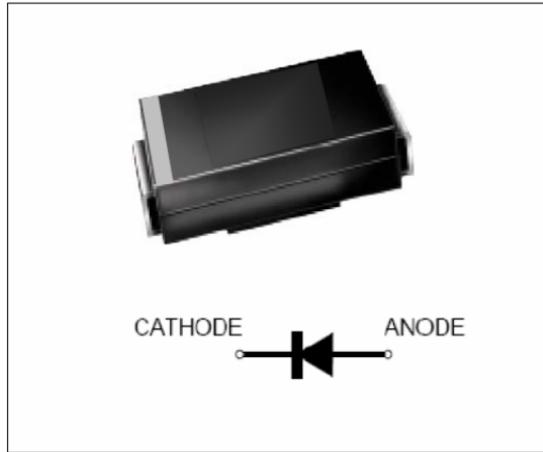
Terminals: Plated axial leads, solderable per
MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0023 oz., 0.065 g

Handling precaution: None



We declare that the material of product compliance
with ROHS requirements

1. Electrical Characteristic

Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	S-SM340A	Unit
device marking code		S34	
Maximum repetitive peak reverse voltage	V_{RPM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current at $T_C = 75^\circ C$	$I_{F(AV)}$	3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80	A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	175	°C/W
	$R_{\theta JC}$	50	
Operating junction and storage temperature range	T_J , T_{STG}	-40 to +150	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	S-SM340A	Unit
Maximum instantaneous forward voltage at 3.0A	V_F	0.55	V
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_J = 100^\circ C$	I_R	0.5 10.0	mA
Typical junction capacitance at 4.0V, 1MHz	C_J	260	PF

NOTES:

1. FR-4 Board, Heat sinks with single-sided copper foil, copper foil thickness 50μm 1.77* 1.60 * 2

S-SM340A

2.Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

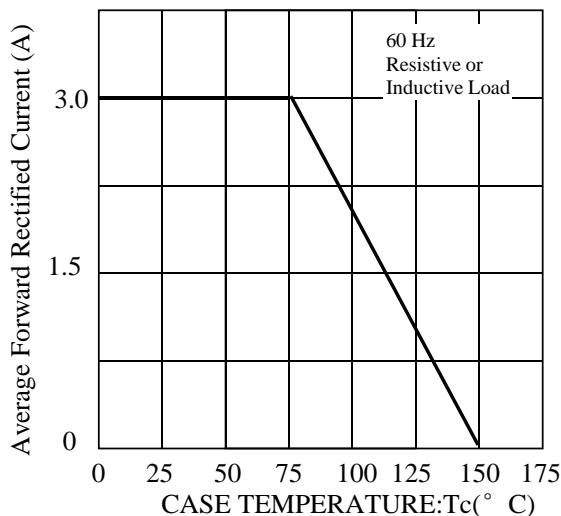


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

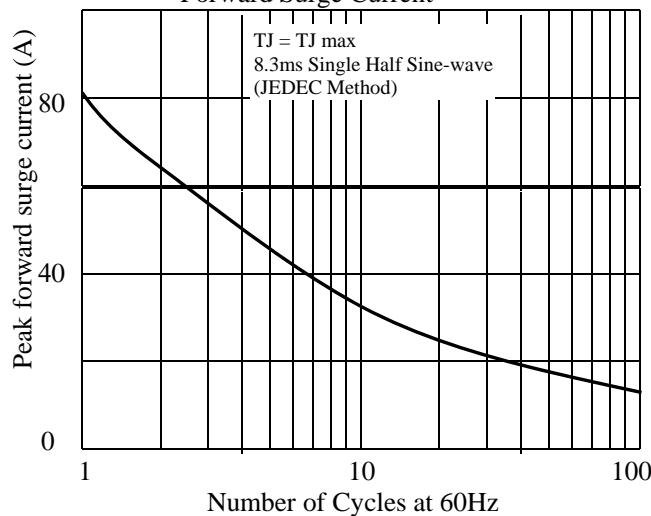


Fig 3. - Typical Instantaneous Forward Characteristics

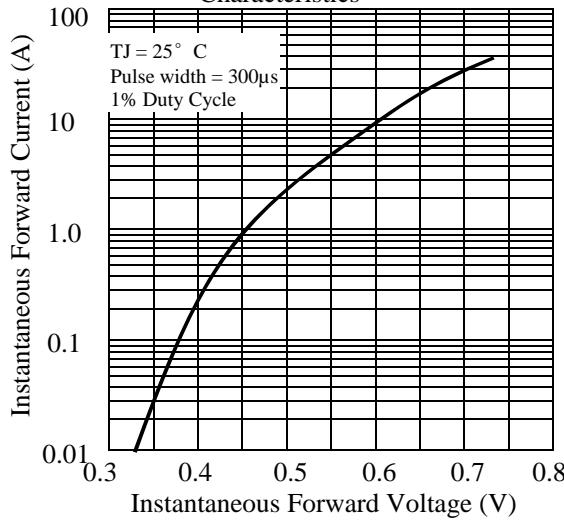


Fig 4. - Typical Reverse Characteristics

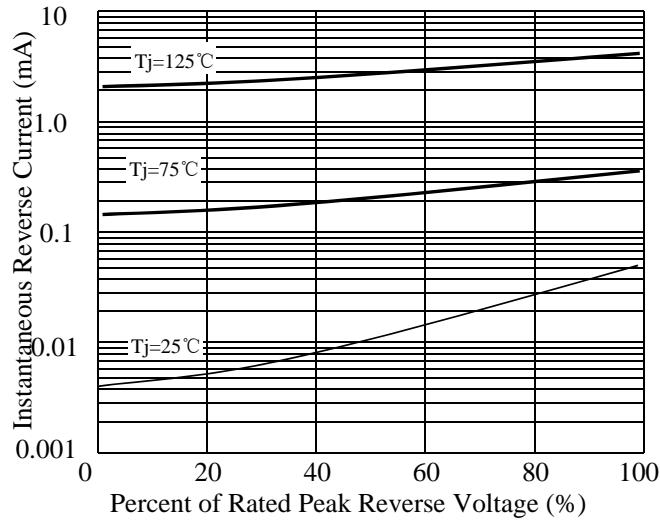


Fig 5. - typical transient thermal impedance

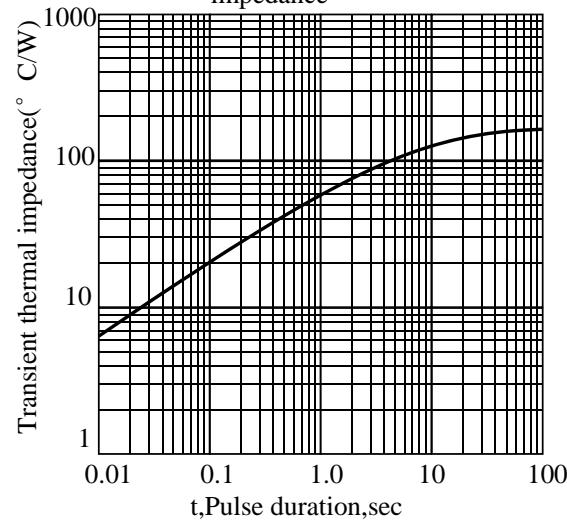
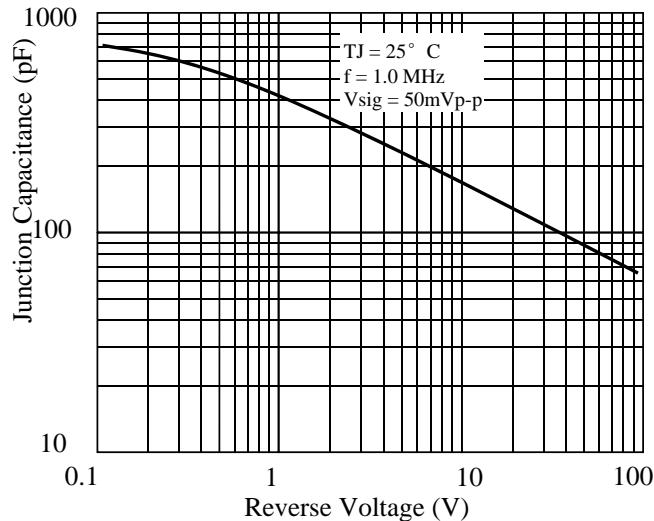


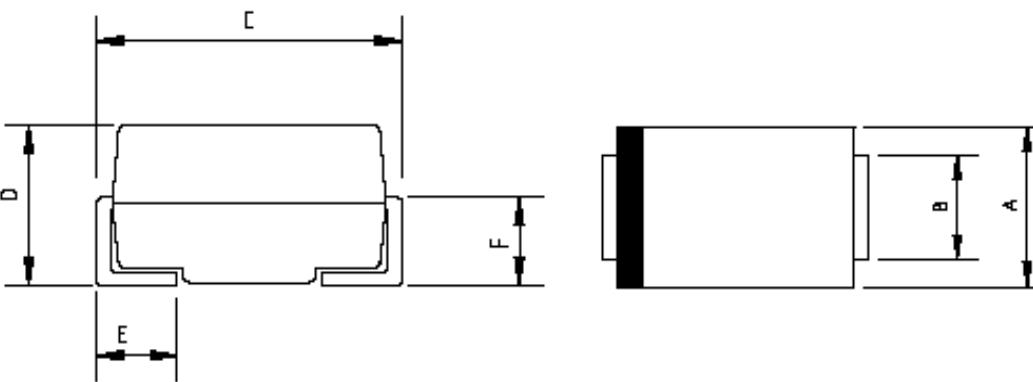
Fig 6. - Typical Junction Capacitance



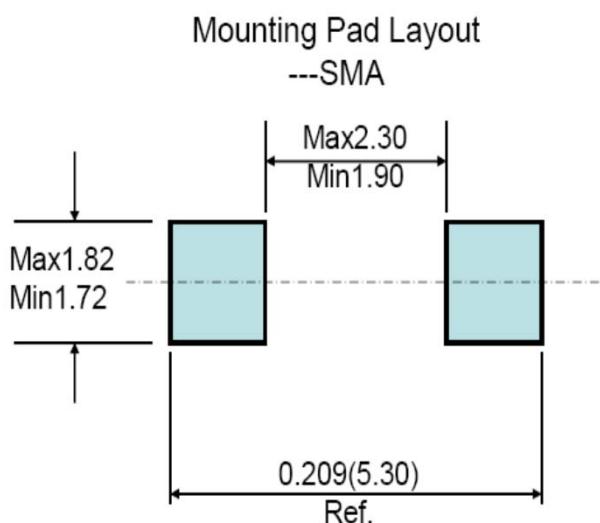
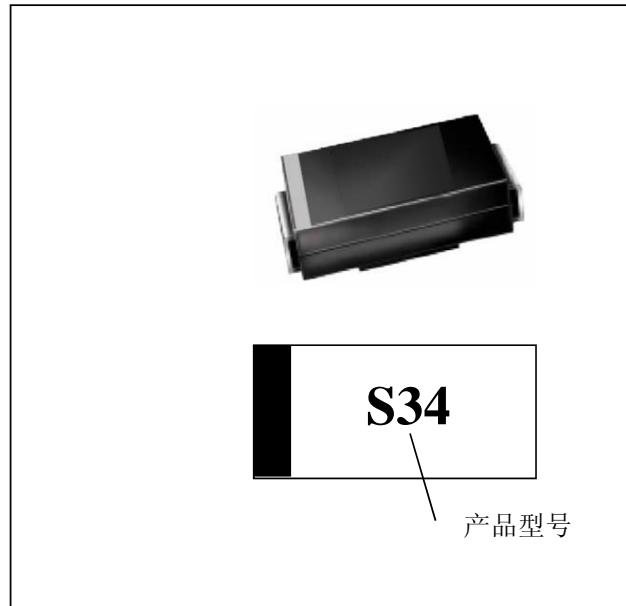
S-SM340A

3. dimension:

Package outline



Dimensions				Note: DO-214AC molded plastic case The marking band indicates the cathode
	inches	mm		
	Min.	Max.	Min.	Max.
A	0.086	0.110	2.2	2.8
B	0.051	0.067	1.3	1.7
C	0.185	0.209	4.7	5.3
D	0.067	0.100	1.7	2.55
E	0.035	0.059	0.9	1.5
F	0.035	0.059	0.9	1.5



S-SM340A

6. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2014-4-11
2	变更印字	谭志伟	2017-10-25
B	VF 0.5V变更到0.55V	谭志伟	2021-10-09

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)