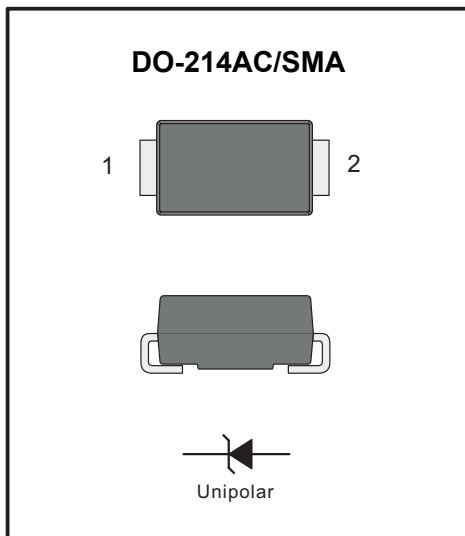


## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250 °C/10 seconds at terminals

### Mechanical Data

- ◆ Case : JEDEC DO-214AC/SMA molded plastic body
- ◆ Terminals : Solderable per MIL-STD-750, Method 2026
- ◆ Polarity : Color band denotes cathode end Mounting
- ◆ Position : Any
- ◆ Weight : 0.002 ounce, 0.07 grams

## Maximum Ratings And Electrical Characteristics

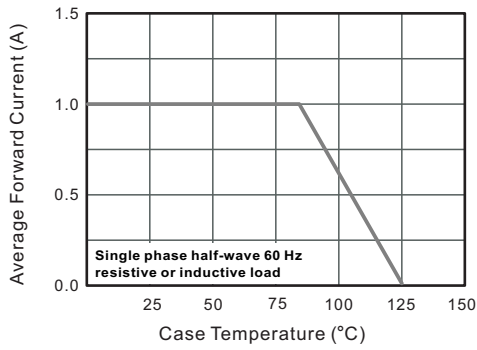
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

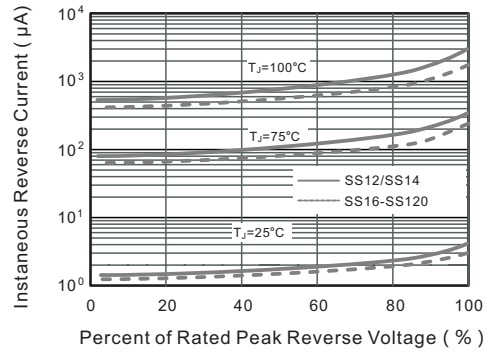
Parameter	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS1200	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current at TL (see fig. 1)	$I_{(AV)}$	1.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30									A	
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.45	0.55	0.70			0.85		0.9	V		
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5					0.2				mA	
		10.0			5.0		2.0					
Typical junction capacitance (NOTE 1)	$C_J$	110			90						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0									°C/W	
Operating junction temperature range	$T_J$	-50 to +125					-50 to +150					°C
Storage temperature range	$T_{STG}$	-50 to +150									°C	

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

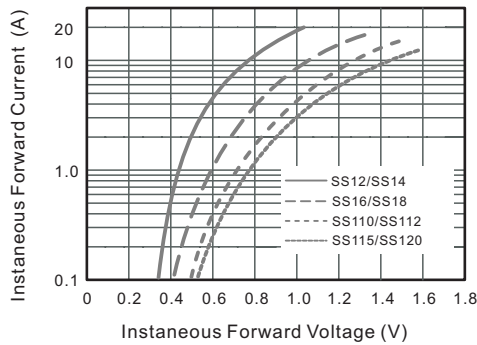
**Fig.1 Forward Current Derating Curve**



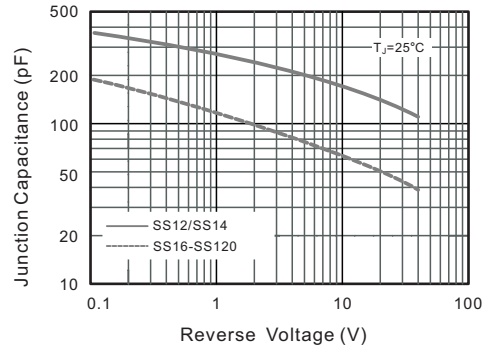
**Fig.2 Typical Reverse Characteristics**



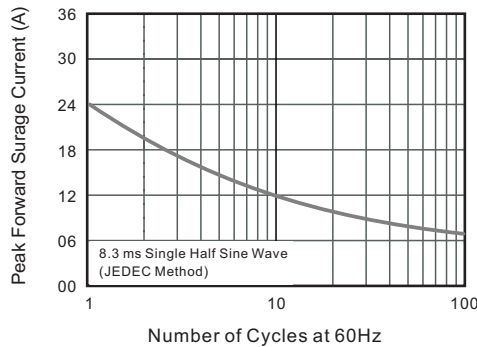
**Fig.3 Typical Forward Characteristic**



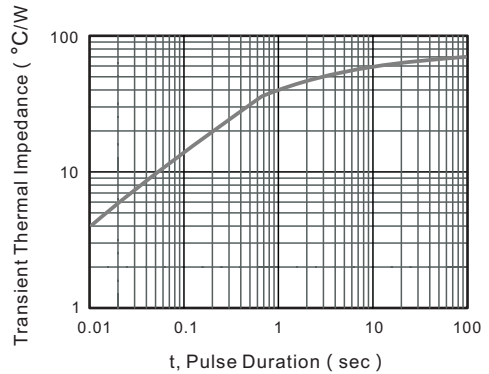
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



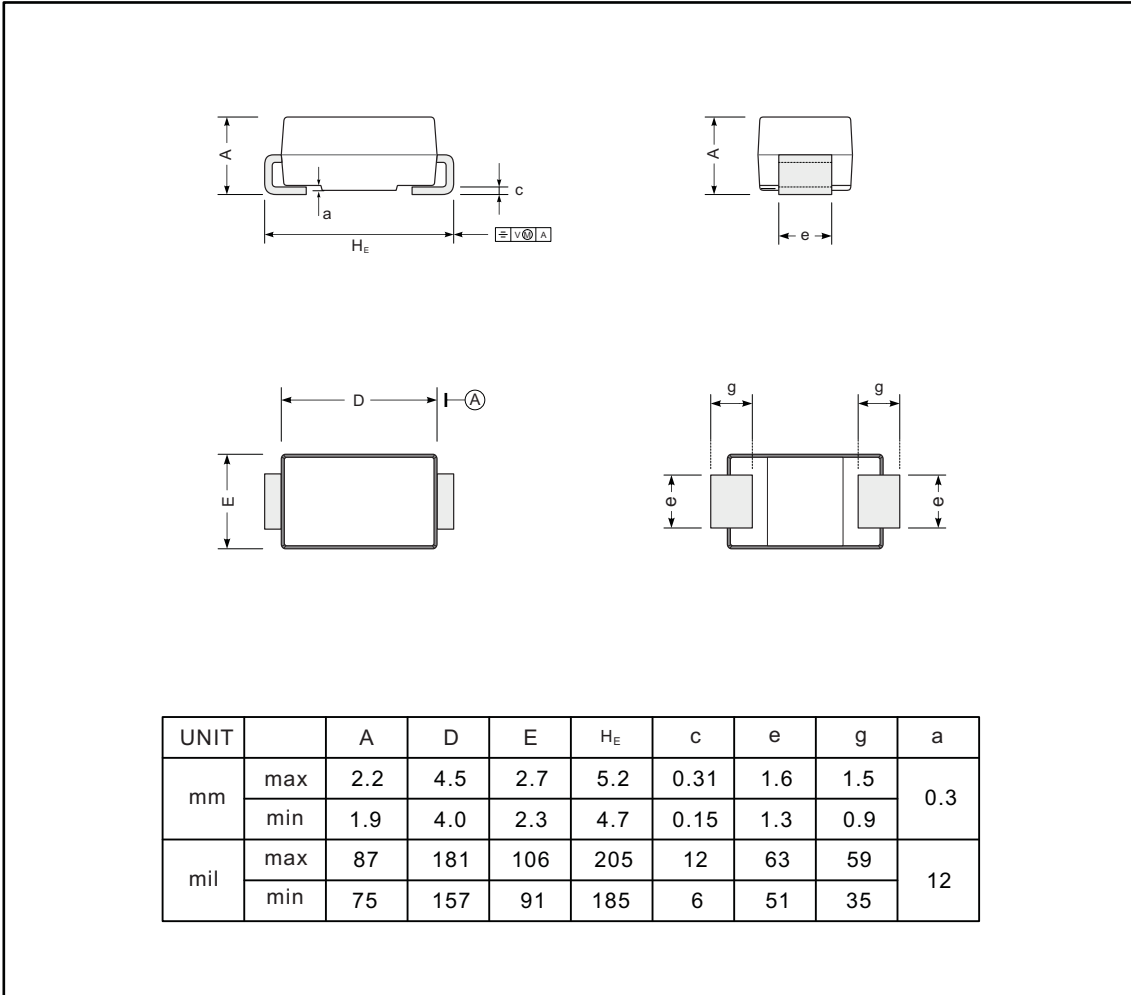
**Fig.6- Typical Transient Thermal Impedance**



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMA



### The recommended mounting pad size

