SS52 THRU SS5200

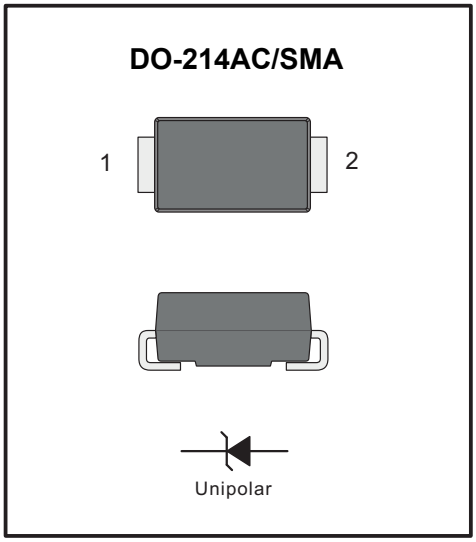
Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Ampere

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

DO-214AC/SMA



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℃ ambient temperature unless otherwise specified.

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

Parameter	SYMBOLS	SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS5150	SS5200	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)	$I_{(AV)}$	5.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	125									A
Maximum instantaneous forward voltage at 5.0A	V_F	0.55			0.70		0.85			0.95	V
Maximum DC reverse current T_A=25℃	I_R	0.5							0.2		mA
at rated DCblocking voltage T_A=125℃		20					10		2.0		
Typical junction capacitance (NOTE 1)	C_J	200									pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0									℃/W
Operating junction temperature range	T_J	-50 to +125					-50 to +150				℃
Storage temperature range	T_{STG}	-50 to +150									℃

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

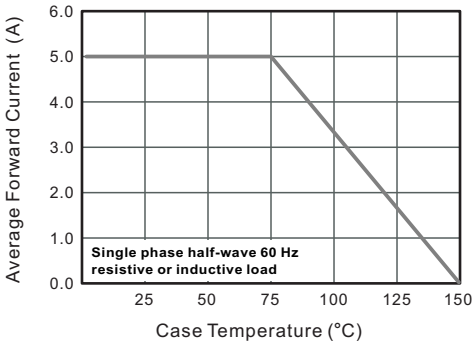


Fig.2 Typical Reverse Characteristics

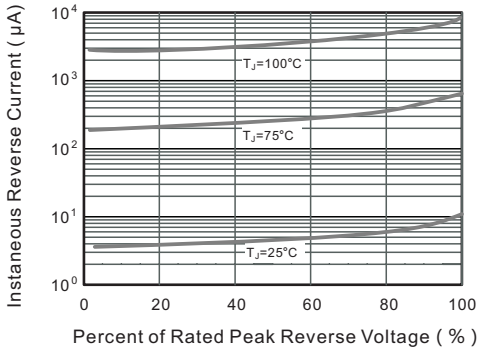


Fig.3 Typical Forward Characteristic

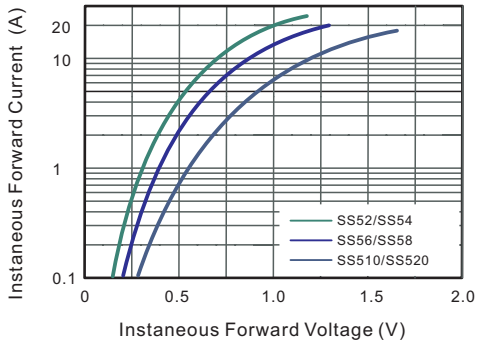


Fig.4 Typical Junction Capacitance

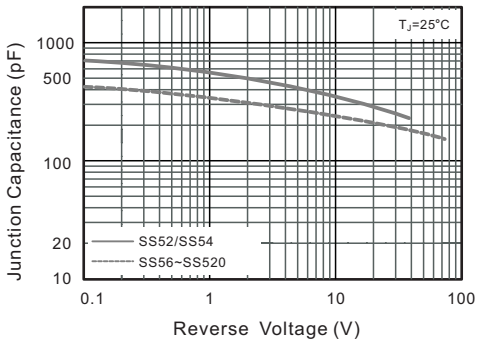


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

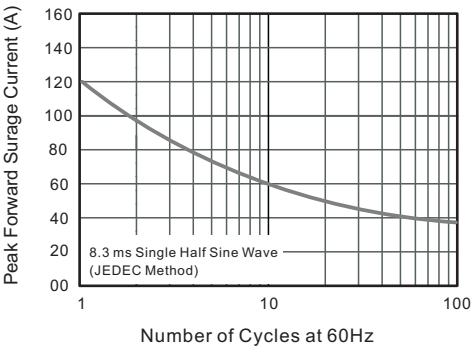
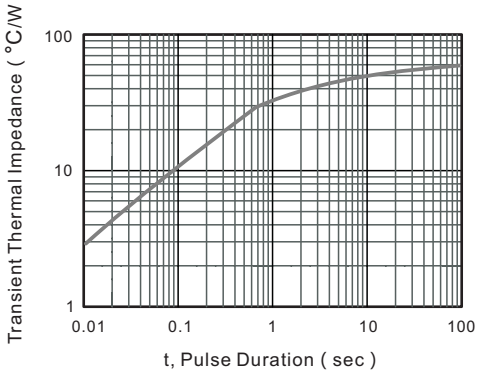
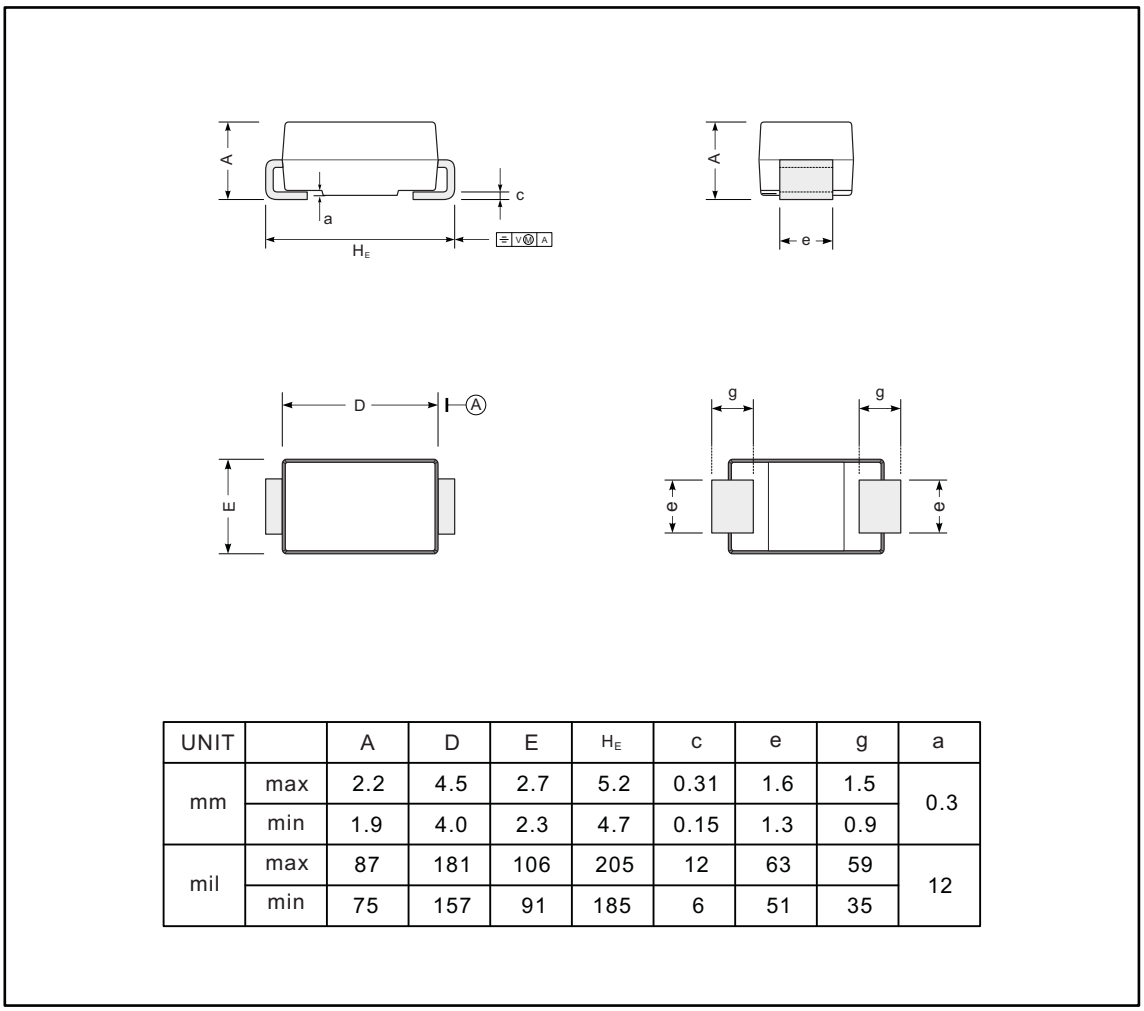


Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SMA**



UNIT		A	D	E	H_E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	

The recommended mounting pad size