

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 20 to 200 V
Forward Current - 2 A
FEATURES

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives


MECHANICAL DATA

- ◆ Case: DO-214AC/SMA
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.7g / 0.002oz

Absolute 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, derate by 20 %

Pinning	
1.Cathode	2.Anode
1	2
	
DO-214AC/SMA	
Marking Code	
SS22	SS22
SS24	SS24
SS26	SS26
SS28	SS28
SS210	SS210
SS212	SS212
SS215	SS215
SS220	SS220

Parameter	Symbols	SS22	SS24	SS26	SS28	SS210	SS212	SS215	SS220	Units			
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V			
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V			
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V			
Maximum Average Forward Rectified Current	I_{F(AV)}	2.0							A				
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	50							A				
Maximum Instantaneous Forward Voltage at 2 A	V_F	0.55		0.70		0.85		0.90		V			
Maximum Instantaneous Reverse Current $T_A = 25^\circ C$ at Rated DC Reverse Voltage $T_A = 100^\circ C$	I_R	0.5 5		0.3 3						mA			
Typical Junction Capacitance ⁽¹⁾	C_J	220		80									
Typical Thermal Resistance ⁽²⁾	R_{θJA}	80							$^\circ C/W$				
Operating Junction Temperature Range	T_j	-55 ~ +150							$^\circ C$				
Storage Temperature Range	T_{stg}	-55 ~ +150							$^\circ C$				

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

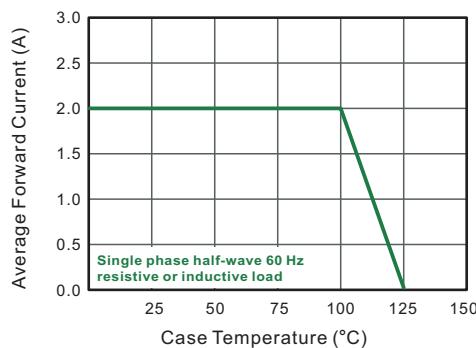


Fig.2 Typical Reverse Characteristics

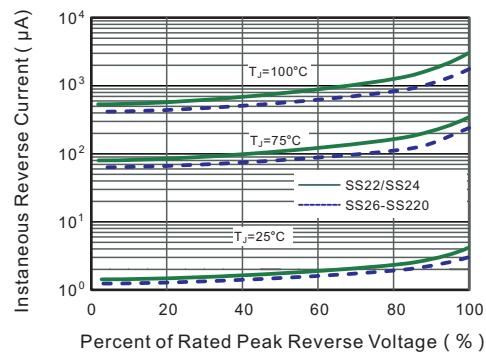


Fig.3 Typical Forward Characteristic

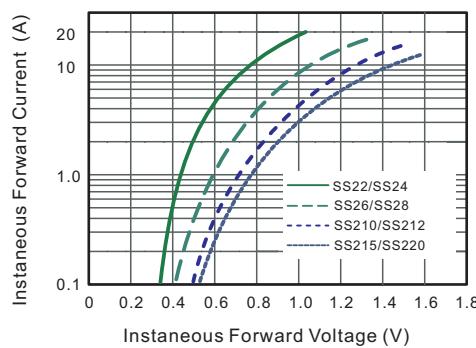


Fig.4 Typical Junction Capacitance

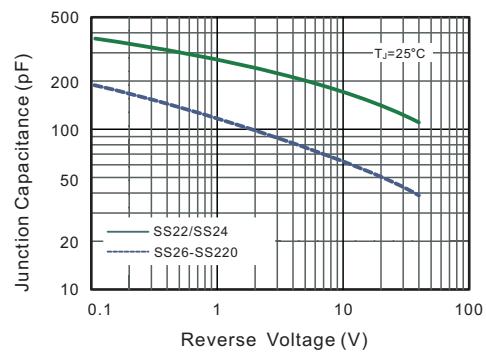


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

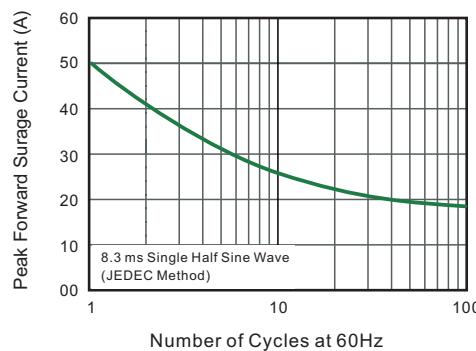
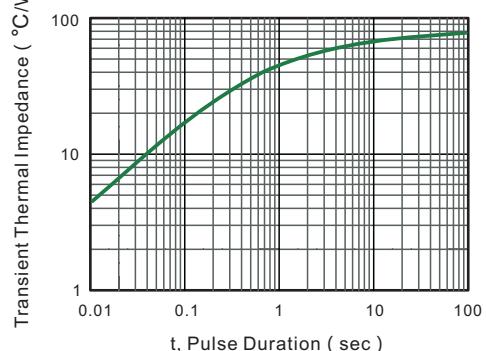


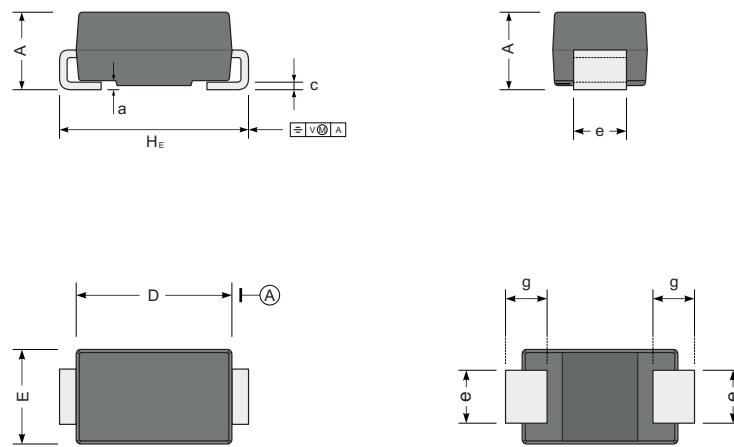
Fig.6- Typical Transient Thermal Impedance



Package Outline

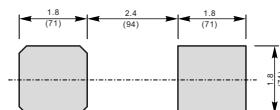
DO-214AC SMA

Plastic surface mounted package; 2leads



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.42	4.5	2.80	5.2	0.31	1.6	1.5	0.3
	min	1.98	4.0	2.54	4.7	0.15	1.3	0.9	
mil	max	96	181	110	205	12	63	59	12
	min	78	157	100	185	6	51	35	

The recommended mounting pad size



Unit : $\frac{\text{mm}}{(\text{mil})}$

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AC SMA	Tape/Reel, 11" reel	5000	EIA-481-1
	Tape/Reel, 7" reel	2000	EIA-481-1