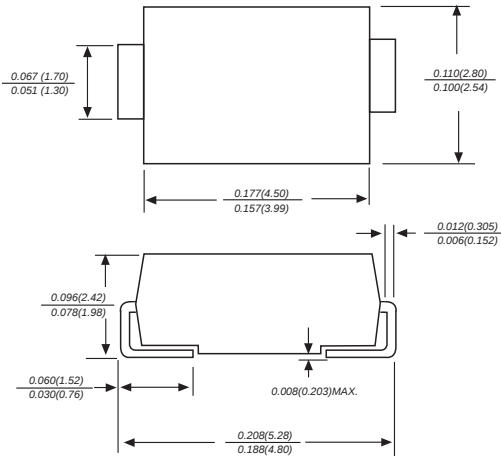




SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

DO-214AC/SMA



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds at terminals
- ◆ MSL 3
- ◆ ROHS

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body
Terminals: leads 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%.

MDD Catalog Number	SYMBOLS	SS52	SS53	SS54X	SS55	SS56	SS58	SS510	SS5150	SS5200	UNITS
Marking code		SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS5150	SS5200	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	150	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	5.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	125.0									Amps
Maximum instantaneous forward voltage at 5.0A	V _F	0.55			0.70		0.85			0.95	Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5						0.2		mA	
		20			10		2.0				
Typical junction capacitance (NOTE 1)	C _J	200									pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0									°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.

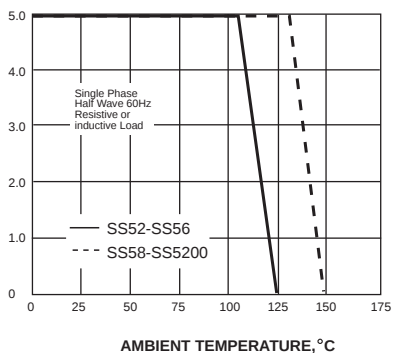
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

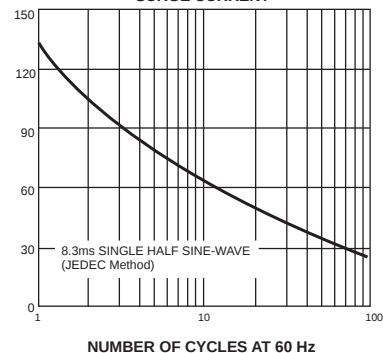
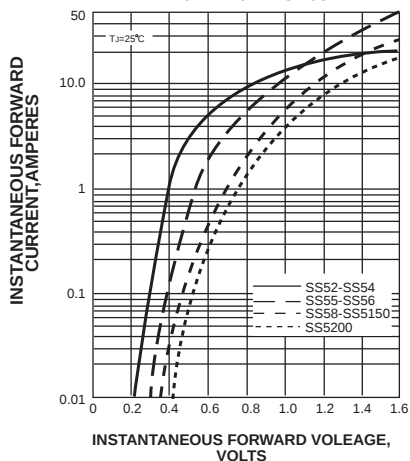


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

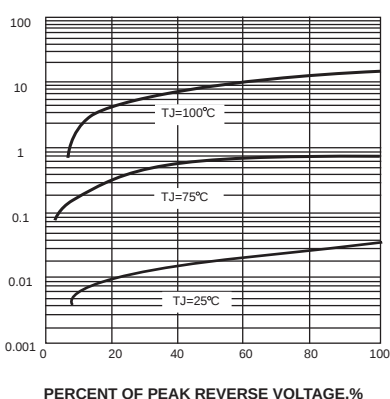
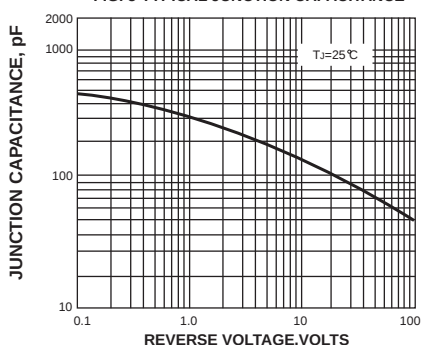
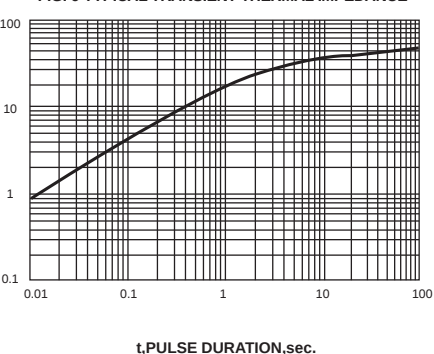


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

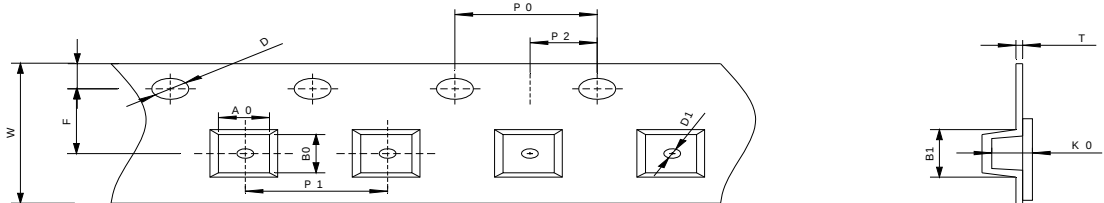
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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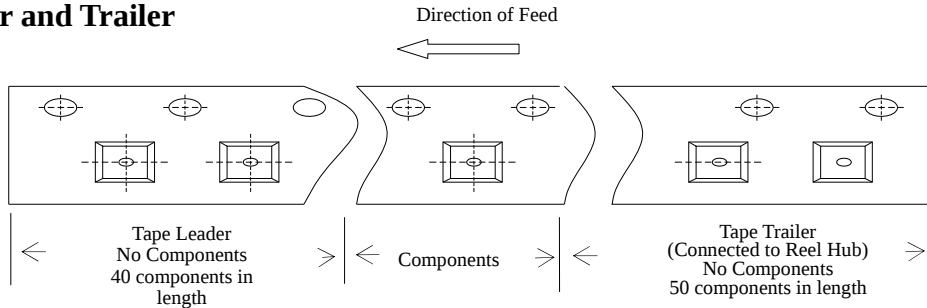
SMA Reel Dim



A0	B0	B1	D	D1	E	F	K0	T	W	P0	P1	P2
2.7	5.3	5.5	1.5	1.0	1.75	3.5	2.5	0.50	12	4.0	4.0	2.0

Dimension is in mm

Leader and Trailer



The LEADER is a minimum of 40 components in length and it consists of empty cavities with sealed cover tape

The TRAILER is a minimum of 50 components in length and it consists of empty cavities with sealed cover tape.

Ordering Information

Device	Qty per Reel	Reel Size
SS5X	5000/2000	13/7 Inch