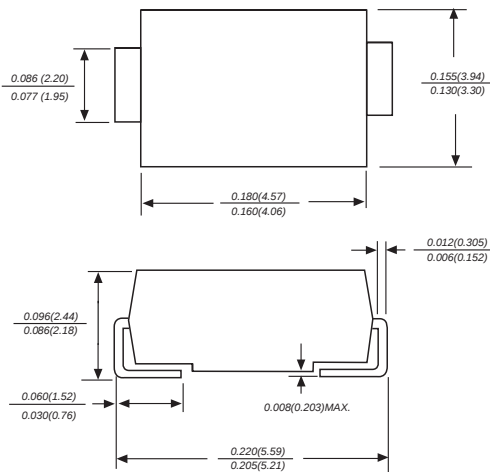


DO-214AA/SMB



Dimensions in inches and (millimeters)

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: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.005 ounce, 0.138 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

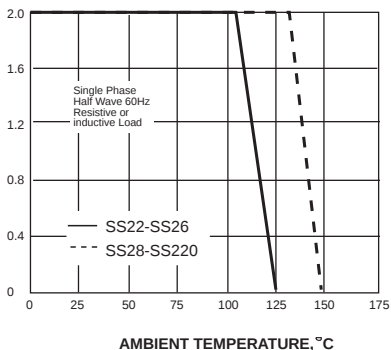
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SS22	SS23	SS24	SS25	SS26	SS28	SS210	SS215	SS220	UNITS
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	140	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)	2.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0									Amps
Maximum instantaneous forward voltage at 2.0A	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
		10.0			5.0		2.0				
Typical junction capacitance (NOTE 1)	C _J	220			180						pF
Typical thermal resistance (NOTE 2)	R _{θJA}	75.0									°C/W
Operating junction temperature range	T _J	-65 to +150					-65 to +175				°C
Storage temperature range	T _{STG}	-65 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

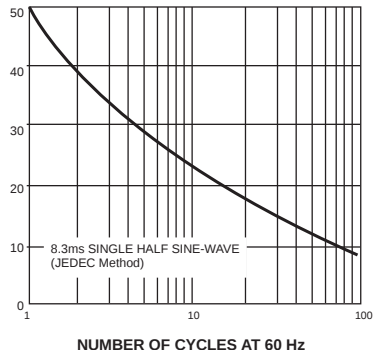
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



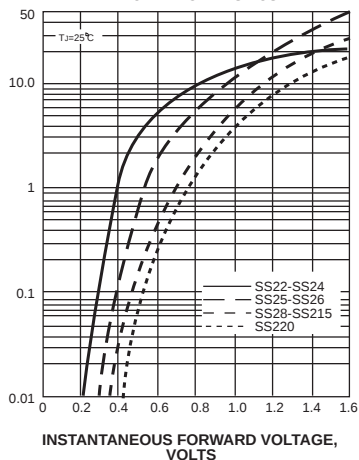
PEAK FORWARD SURGE CURRENT,
AMPERES

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



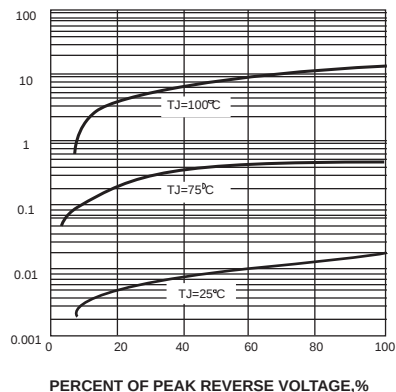
INSTANTANEOUS FORWARD
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



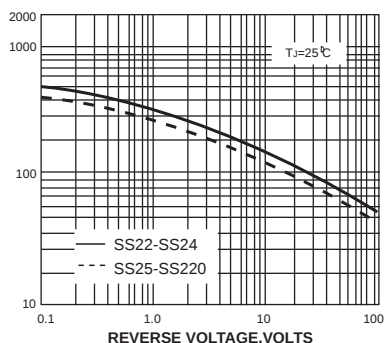
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



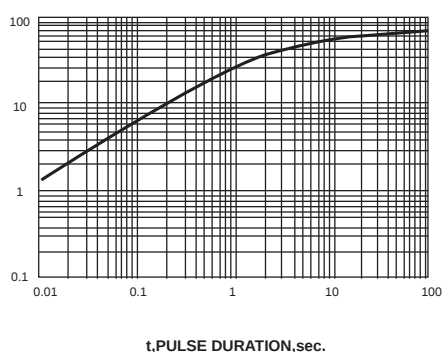
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE





Packaging

Tape	Symbol		Dimension (mm)	
	W		12.00 ± 0.20	
	P0		4.00 ± 0.10	
	P1		8.00 ± 0.10	
	P2		2.00 ± 0.10	
	D0		$\Phi 1.55 \pm 0.10$	
	D1		$\Phi 1.5 \pm 0.10$	
	E		1.75 ± 0.10	
	F		5.50 ± 0.10	
	A0		3.86 ± 0.15	
7" Reel	B0		5.65 ± 0.10	
	K0		2.75 ± 0.15	
	T		0.25 ± 0.05	
	D2		$\Phi 178.0 \pm 2.0$	
	D3		$\Phi 50.0 \text{Min.}$	
	D4		$\Phi 13.0 \pm 0.5$	
13" Reel	W1		16.0 ± 2.0	
	Quantity: 500PCS			
	D5		$\Phi 330.0 \pm 2.0$	
	D6		$\Phi 13.5 \pm 0.5$	
	H		2.5 ± 1.0	
	W2		16.0 ± 2.0	
	Quantity: 3000PCS			