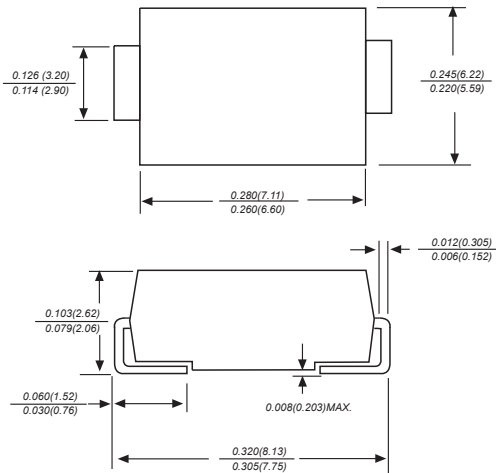


DO-214AB/SMC



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

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.007 ounce, 0.25grams

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%.

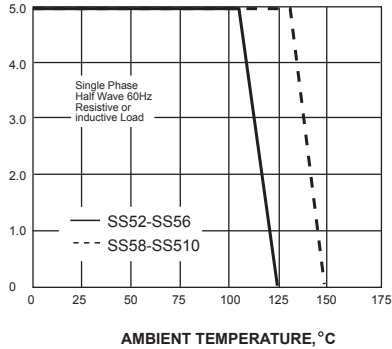
	SYMBOLS	SS52	SS53	SS54	SS55	SS56	SS58	SS510	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at T _L (see 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}	150.0							Amps
Maximum instantaneous forward voltage at 5.0A	V _F	0.55			0.70		0.85		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5							mA
		20					10		
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	-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

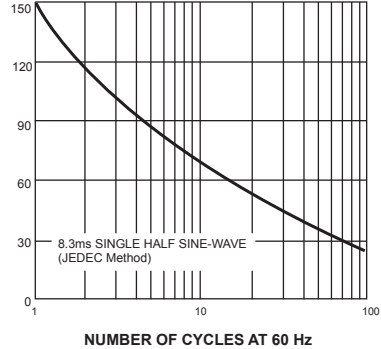
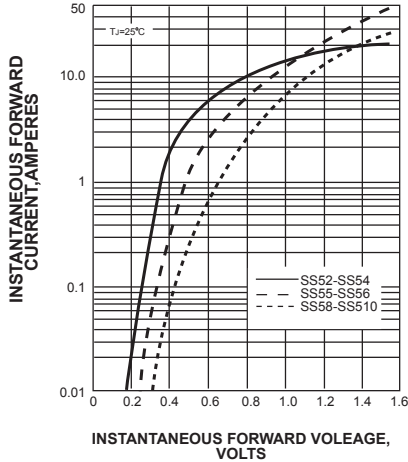


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

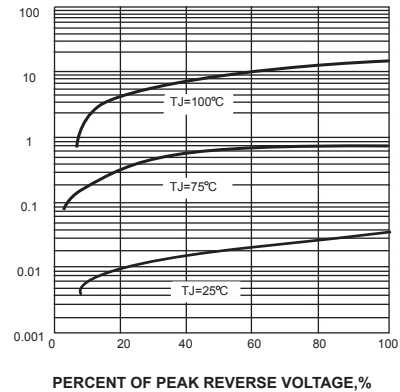
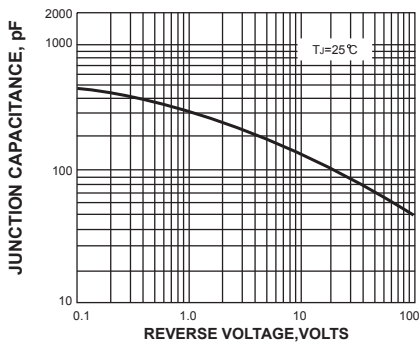
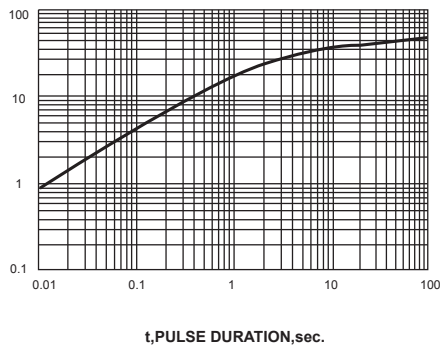


FIG. 5-TYPICAL JUNCTION CAPACITANCE



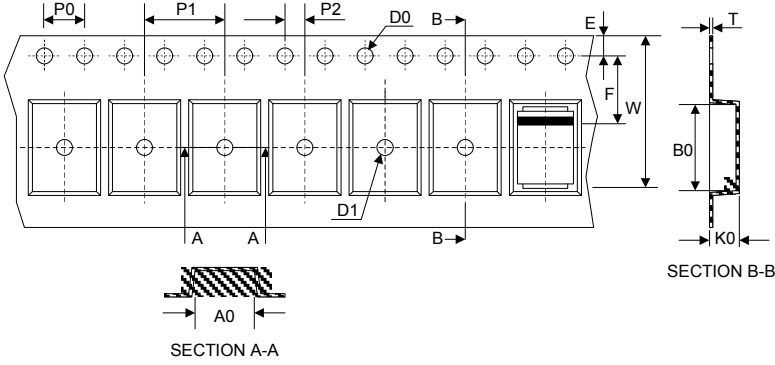
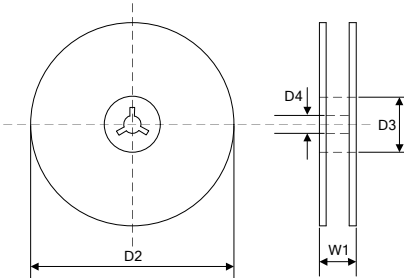
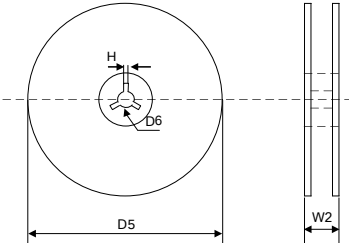
TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE





Packaging

Tape	Tape		Symbol	Dimension (mm)
			W	16.00±0.20
			P0	4.00±0.10
			P1	8.00±0.10
			P2	2.00±0.10
			D0	Φ1.5±0.10
			D1	Φ1.5±0.10
			E	1.75±0.10
			F	7.50±0.10
			A0	6.27±0.10
			B0	8.30±0.10
7" Reel			K0	3.15±0.15
			T	0.30±0.05
			D2	Φ178.0±2.0
			D3	Φ50.0Min.
			D4	Φ13.0±0.5
			W1	20.0±2.0
13" Reel			Quantity: 500PCS	
			D5	Φ330.0±2.0
			D6	Φ13.5±0.5
			H	2.5±1.0
			W2	20.0±2.0
			Quantity: 3000PCS	