



## SS32 THRU SS320

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

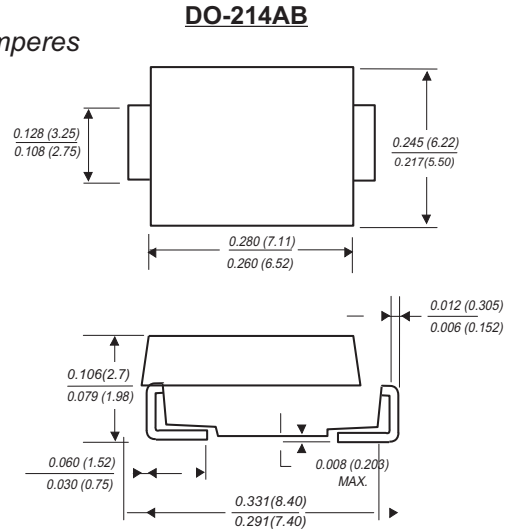
**Reverse Voltage** -20 to 200 Volts **Forward Current** -3.0 Amperes

#### 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-214AB molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight** :0.22 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	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320	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 <sub>L</sub> (see fig.1)	$I_{(AV)}$	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	70.0									Amps
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.55		0.70		0.85		0.95			Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	20		10		1.0					mA
Typical junction capacitance (NOTE 1)	$C_J$	500		300							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0		62.0							°C/W
Operating junction temperature range	$T_J$	-65 to +125		-65 to +150							°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

**RATINGS AND CHARACTERISTIC CURVES SS32 THRU SS320**

FIG. 1- FORWARD CURRENT DERATING CURVE

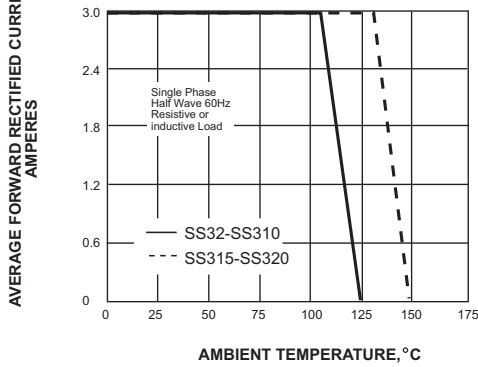


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

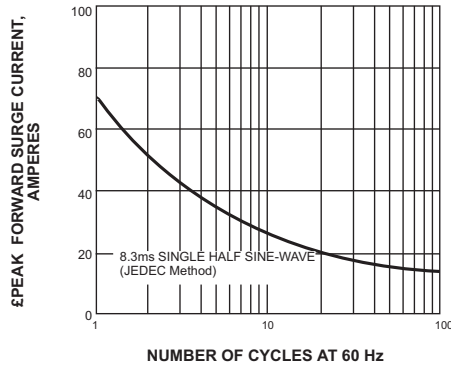


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

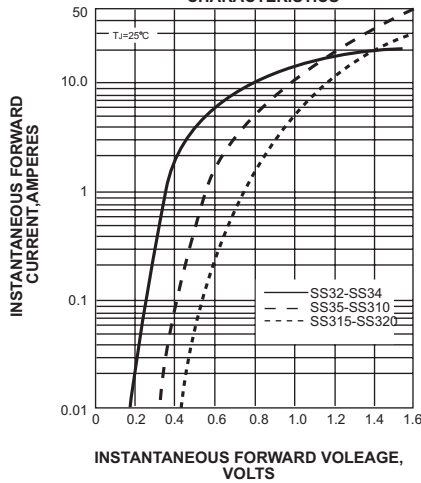


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

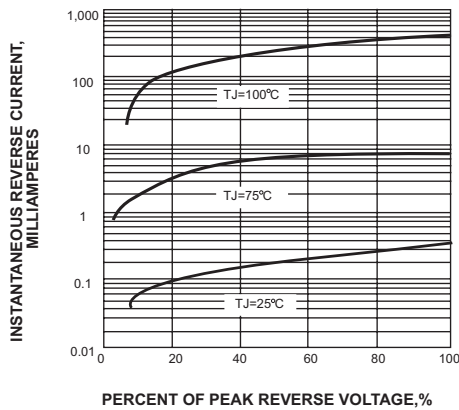


FIG. 5-TYPICAL JUNCTION CAPACITANCE

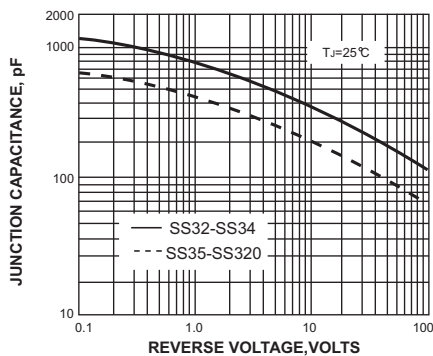


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

