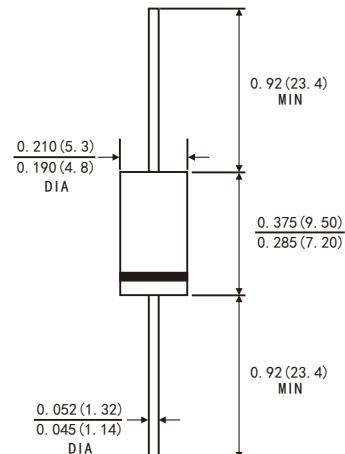


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041 ounce, 1.15 grams


DO-201AD


Dimensions in inches and (millimetres)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	SR 5250		Units
Maximum repetitive peak reverse voltage	V _{RRM}	250		Volts
Maximum RMS voltage	V _{RMS}	175		Volts
Maximum DC blocking voltage	V _{DC}	250		Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig.1)	I _(AV)	5.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T _J)	I _{FSM}	120.0		Amps
	Symbols	TYP.	MAX.	Units
Instantaneous forward voltage at 5.0 A (Note 1)	V _F	0.83	0.9	Volts
Reverse current at rated DC blocking voltage (Note 1) T _A =25°C	I _R	-	5	µ A
		-	2	mA
Typical junction capacitance (Note 3)	C _J	70		pF
Typical thermal resistance (Note 2)	R _{θJA} R _{θJL}	25.0 8.0		°C/W
Operating junction temperature range	T _J	-55 to +150		°C
Storage temperature range	T _{STG}	-55 to +150		°C

Notes: 1. Pulse test: 300µ s pulse width, 1% duty cycle

2. Thermal resistance from junction to lead vertical P.C.B. mounted, 0.375" (9.5mm) lead length

3. Measured at 1MHz and reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES SR5250

FIG.1-FORWARD CURRENT DERATING CURVE

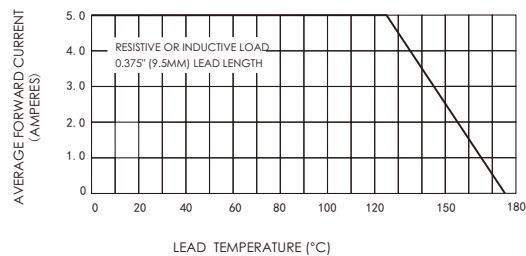


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

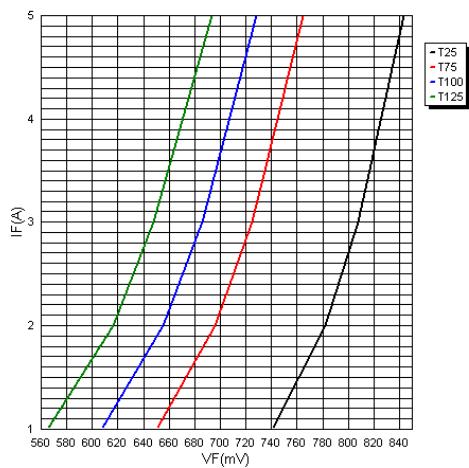


FIG.5-TYPICAL JUNCTION CAPACITANCE

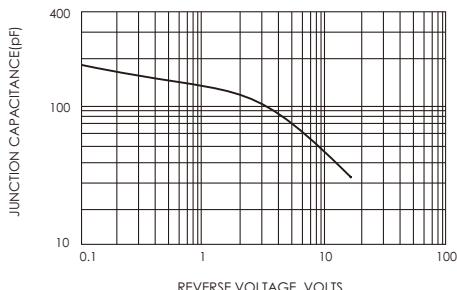


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

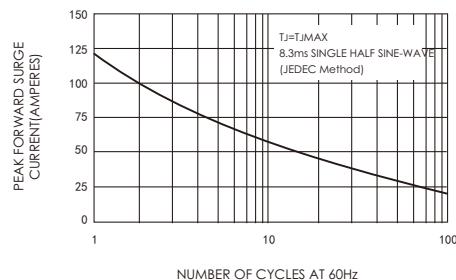


FIG.4-TYPICAL REVERSE CHARACTERISTICS

