



S E M I C O N D U C T O R

SR10100

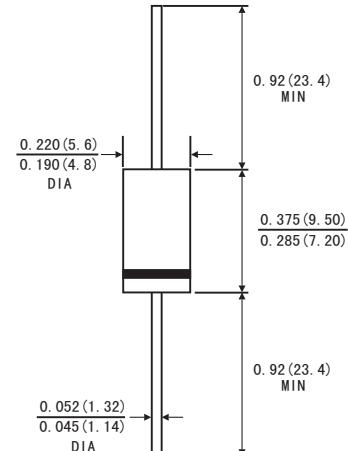
SCHOTTKY BARRIER RECTIFIER
Reverse Voltage - 100 Volts
Forward Current - 10.0Amperes

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
- Single rectifier construction
- 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, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



DO-201AD



Dimensions in inches and (millimetres)

MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

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 10100	Units
Maximum repetitive peak reverse voltage	V _{RRM}	100	Volts
Maximum RMS voltage	V _{RMS}	70	Volts
Maximum DC blocking voltage	V _{DC}	100	Volts
Maximum average forward rectified current (see Fig.1)	I _(AV)	10.0	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 10.0 A(Notes 1)	V _F	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	I _R	50 5	µA mA
Typical thermal resistance (Notes 2)	R _{θJA} R _{θJL}	40 10	°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: 300 µs pulse width,1% duty cycle

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR10100

FIG.1-FORWARD CURRENT DERATING CURVE

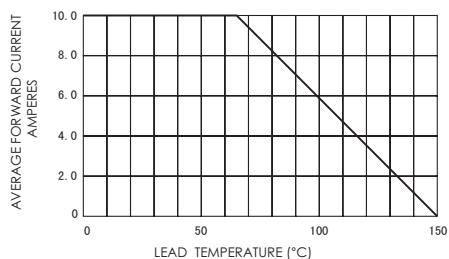


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

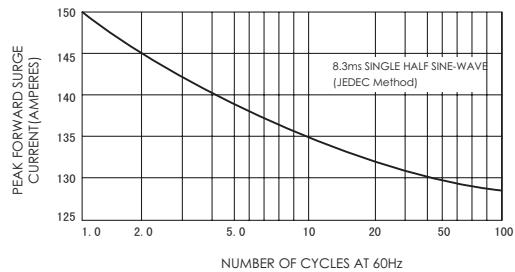


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

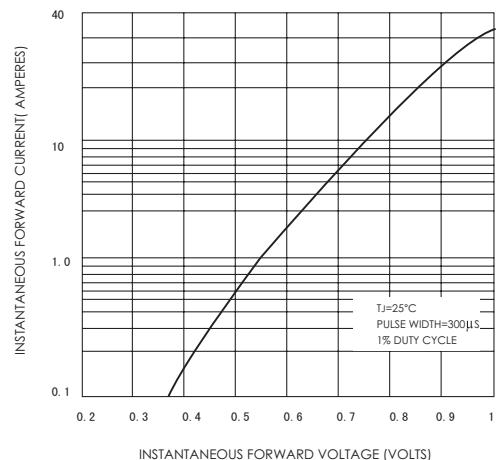


FIG.4-TYPICAL REVERSE CHARACTERISTICS

