CE

CHENYI ELECTRONICS

SR320 THRU SR3A0

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 60 Volts

Forward Current - 1.0Ampere

FEATURES

. Plastic package has Underwriters Laboratory Flammability Classification 94V-0

. Metal sliicon junction ,majority carriet conduction

. Guard ring for overcoltage protection

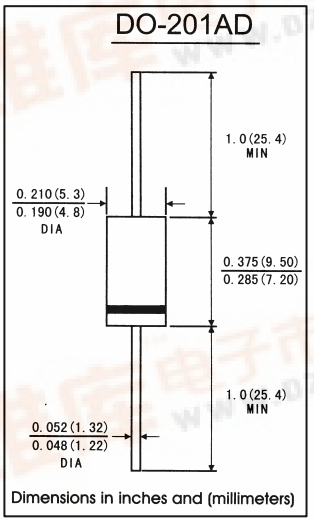
. Low power loss,high efficiency

. High current capability ,Low forward voltage drop

. High surge capability

. For use in low voltage ,high frequency inverters,
free wheeling , and polarilty protection applications

. High temperature soldering guaranteed: 250℃/10 seconds at terminals,
0.375"(9.5mm)lead length, 5lbs.(2.3kg)tension



MECHANICAL DATA

. **Case:** JEDEC DO-201AD molded plastic body

. **Terminals:** plated axial leads,solderable per MIL-STD-750,method 2026

. **Polarity:** coler band denotes cathode end

. **Mounting Position:** Any

. **Weight**: 0.041 ounce, 1.15 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	SR320	SR330	SR340	SR350	SR360	SR380	SR3A0	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	57	71	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length (see Fig.1)	$I_{(AV)}$	3.0							Amp
Peak forward surge current 8.3ms singel half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80.0							Amps
Maximum instantaneous forward voltage at 3.0 A(Note 1)	V_F	0.55			0.70		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) TA=25℃	I_R	1.5							mA
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) TA=100℃	I_R	20			10				mA
Typeical junction capacitance(Note 3)	C_J	250			160				pF
Typeical thermal resistance(Note 2)	$R_{\theta IA}$	40.0							℃/W
	$R_{\theta JL}$	10.0							℃/W
Operating junction temperature range	T_J	-65 to +125			-65 to +150				℃
storage temperature range	T_{STG}	-65 to +150							℃

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

2.Thermal resistance from juntion to lead vertical P.C.B. Mounted, 0.5"(12.7mm)lead length

with 2.5X2.5"(63.5X63.5mm)copper pads

3.Measure a 1MHz and reverse voltage of 4.0volts

RATINGS AND CHARACTERISTIC CURVES SR320 THRU SR3A0

FLG.1-FORWARD CURRENT DERATING CURVE

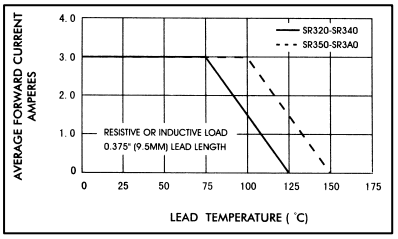


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

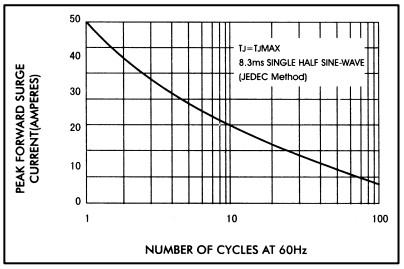


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

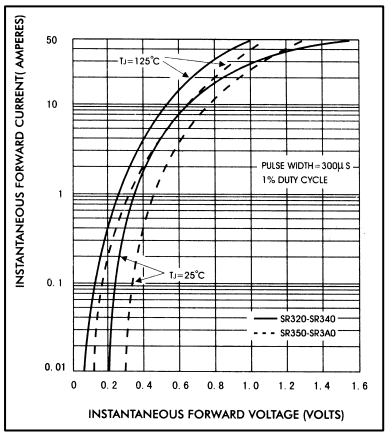


FIG.4-TYPICAL REVERSE CHARACTERISTICS

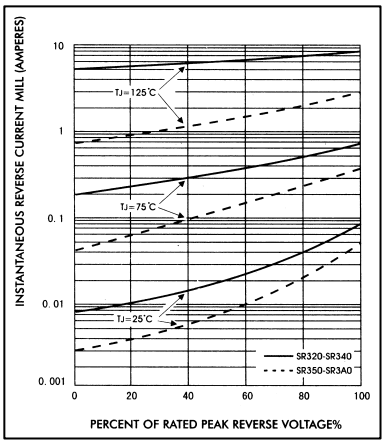


FIG.5-TYPICAL JUNCTION CAPACITANCE

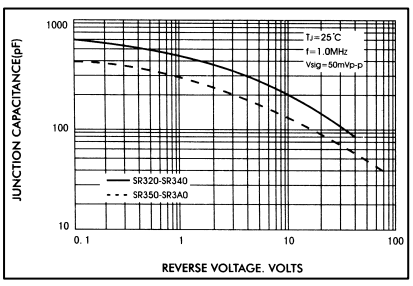


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE