



SURFACE MOUNT BARRIER RECTIFIER

SRB320 THRU SRB3100

VOLTAGE RANGE

20 to 100 Volts

CURRENT

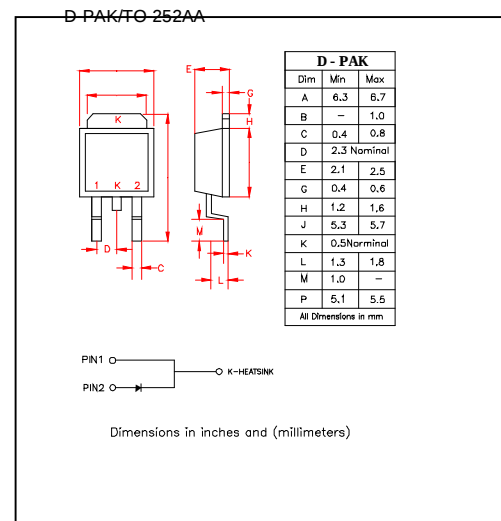
3.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier ,majority carrier conduction
- Low power loss, high efficiency
- High current capability ,low V_F
- High surge capacity
- For use in low voltage high frequency inverters, Free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:
260°C/10seconds at terminals

MECHANICAL DATA

- Case: D-PAK/TO-252AA molded Plastic
- Terminals :Solder plated solderable per MIL-STD-750, METHOD 2026
- Polarity: Color band denotes cathode
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.015 ounce,0.4 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.
- Resistive or inductive load

		SYMBOLS	SRB320	SRB330	SRB340	SRB350	SRB360	SRB380	SRB3100	UNIT
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 _C =80℃		I _(AV)	3.0							Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	80							Amps
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)		V _F	0.55		0.75		0.85		Volts	
Maximum DC Reverse Current (Note1) at rated DC blocking voltage	T _A = 25℃	I _R	0.5							mA
	T _A = 100℃		15.0							
Typical Thermal Resistance (Note 2)		R _{θJC}	6.0							℃/W
		R _{θJA}	80.0							
Typical Junction Capacitance C _J (Note 3)		C _J	400							pF
Operating Junction Temperature Range		T _J	(-55 to +150)							℃
Storage Temperature Range		T _{STG}	(-55 to +150)							℃

Notes:

- Pulse test with $PW=300\mu\text{sec}$, 2% duty cycle
- mounted on P.C. Board with 14mm²(.013mm thick) copper pad areas
- Measured at $f=1.0\text{MHz}$ and $V_R=4\text{V}$



SURFACE MOUNT BARRIER RECTIFIER

SRB320 THRU SRB3100

VOLTAGE RANGE	20 to 100Volts
CURRENT	3.0 Amperes

RATING AND CHARACTERISTIC CURVES SRB320 THRU SRB3100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

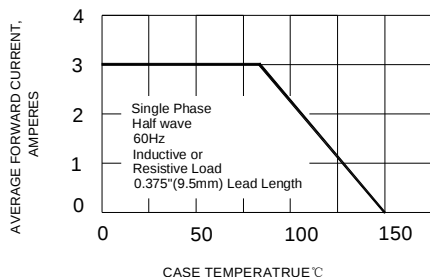


FIG.2-TYPICAL REVERSE CHARACTERISTICS

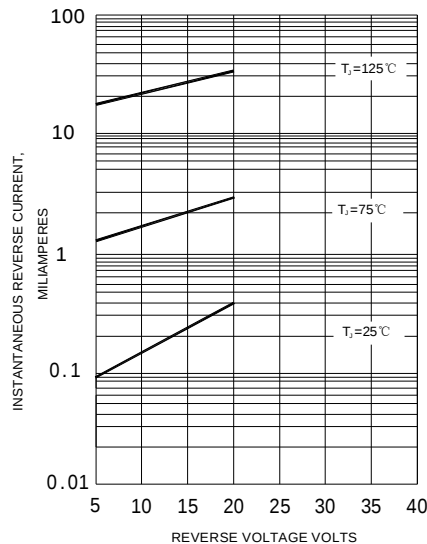


FIG.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

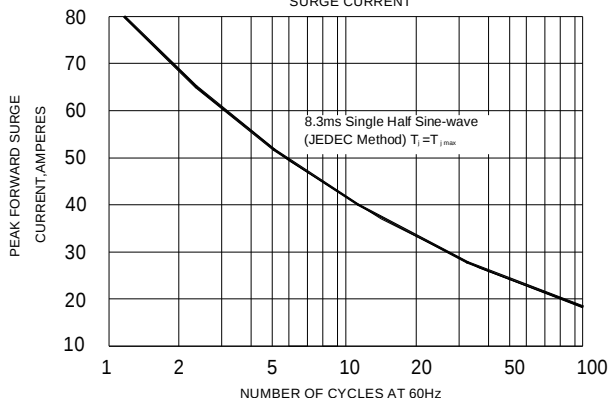


FIG.4-TYPICAL REVERSE CHARACTERISTICS

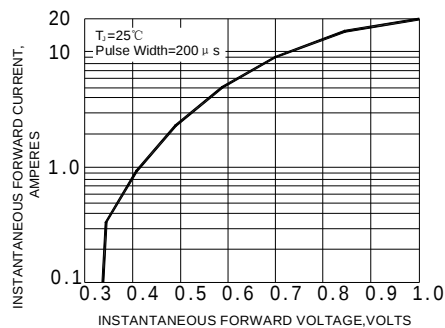


FIG.5-TYPICAL JUNCTION CAPACITANCE

