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SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

SB10200L-MS

Product specification


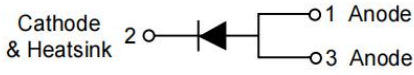

Features

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- HALOGENFREE

MECHANICAL DATA

- CASE: TRANSFER MOLDED
- LEADS: SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: AS MARKED
- WEIGHT: 0.095GRAMS(APPROXIMATELY)

Reference News

TO-277	Schematic Diagram	Marking
		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25, C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED
 SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD.
 FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SB10200L	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	200	V
MAXIMUM RMS VOLTAGE	V_{RMS}	140	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	200	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1 PER LEG	I_o	10	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD PER LEG	I_{FSM}	250	A
STORAGE TEMPERATURE RANGE	T_{STG}	- 65 TO + 150	°C
OPERATING JUNCTION TEMPERATURE RANGE	T_J	- 55 TO + 175	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	SB10200L	UNITS
MAXIMUM FORWARD VOLTAGEAT I _F = 10A T _J =25℃ TYPICAL	VF	0.75	V
T _J =25℃		0.72	
TYPICAL Reverse Recovery Time		/	
TYPICAL FORWARD VOLTAGE AT I _F = 5A T _J =125℃		0.55	
TYPICAL FORWARD VOLTAGE AT I _F = 10 A T _J =125℃		0.65	
MAXIMUM REVERSE CURRENT AT 25℃PER LEG (NOTE 1)	I _R	5	uA
MAXIMUM REVERSE CURRENT AT 125℃PER LEG (NOTE 1)	I _R	2	mA

THERMAL CHARACTERISTICS (T_C =25℃ UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	SB10200L	UNITS
TYPICAL THERMAL RESISTANCE JUNCTION TO CASE PER LEG	Rθjc	23	℃/W

NOTES : 1. PULSE TEST: 300μS PULSE WIDTH, 1% DUTY CYCLE.

RATINGS AND CHARACTERISTIC CURVES OF SB10200L-MS

FIG. 1-FORWARD CURRENT DERATING CURVE

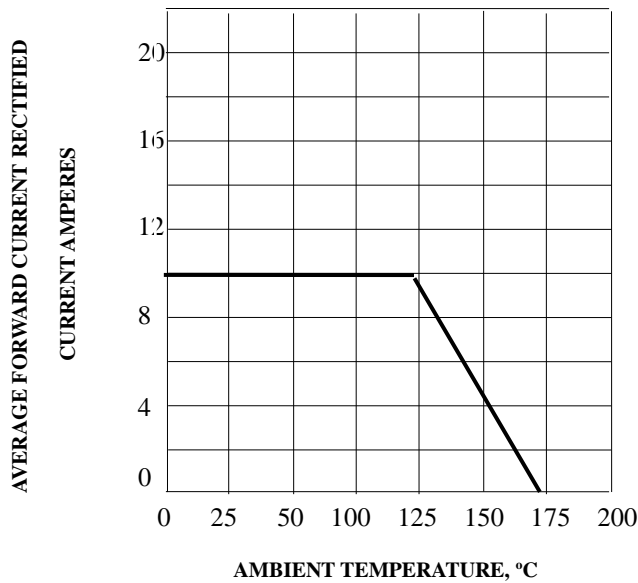


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE RATING

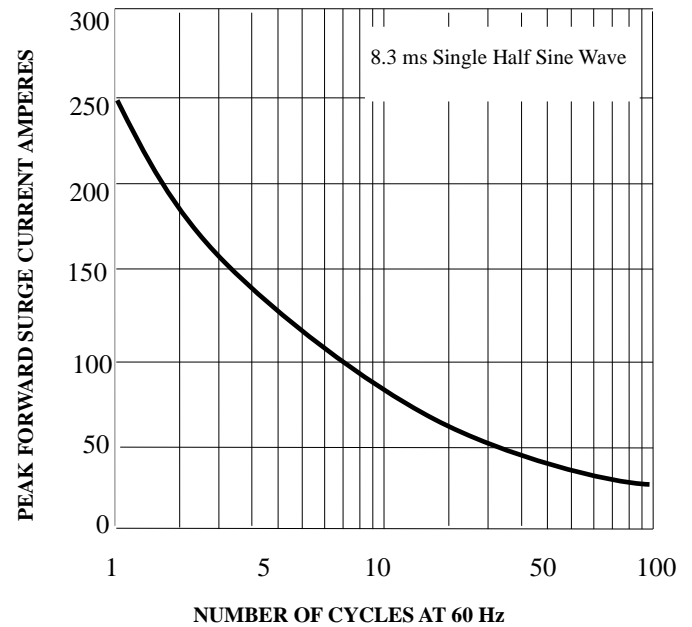


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

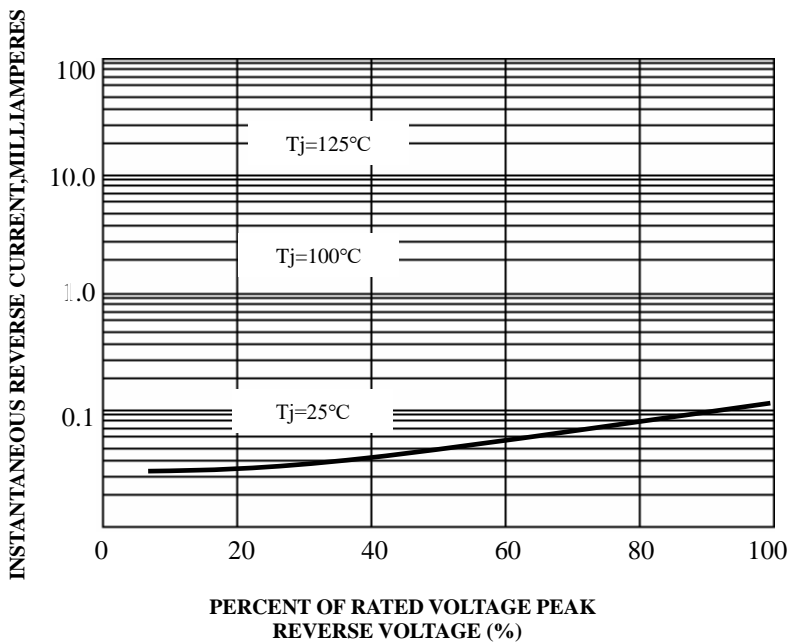
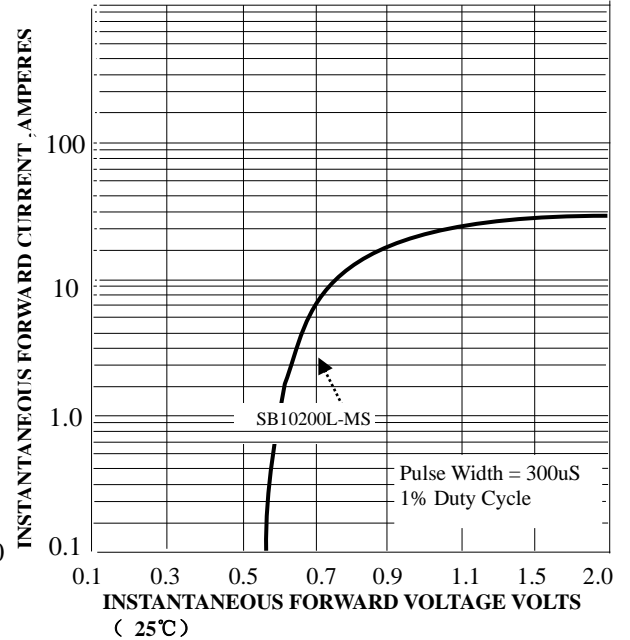
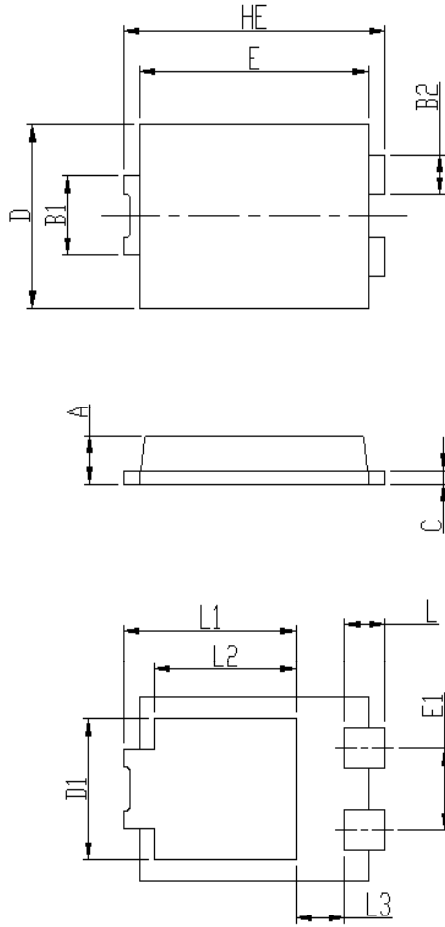


FIG. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

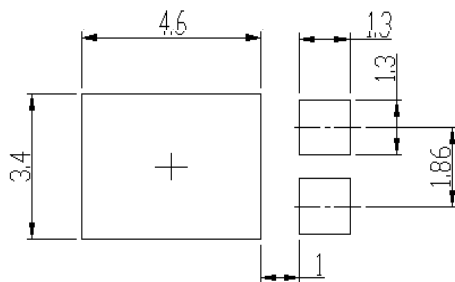


TO-277 Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52 Typ.		0.139 Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86 Typ.		0.073 Typ.	

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Order information

Orderable Device	Package	Packing Option
SB10200L-MS	TO-277	5000PCS

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