BYS10-25 thur BYS10-45

SMD Schottky Barrier Rectifiers

VOLTAGE RANGE: 25 - 45 V

CURRENT: 1.5 A

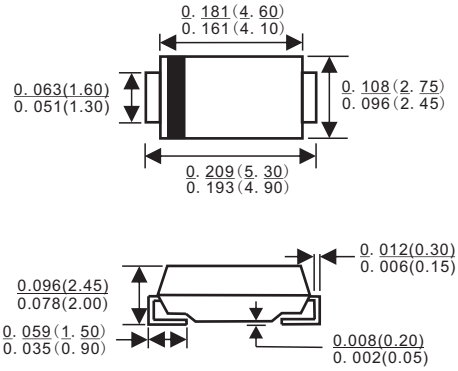
Features

- ✧ For surface mounted applications
- ✧ Low leakage
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ Easily cleaned with Alcohol,Isopropnol and similar solvents
- ✧ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ✧ Case: JEDEC SMA,molded plastic
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.002 ounces, 0.064 grams
- ✧ Mounting position: Any

SMA/DO-214AC



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

Device marking code		BYS10-25	BYS10-45	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	25	45	V
Maximum RMS voltage	V_{RMS}	14	21	V
Maximum DC blocking voltage	V_{DC}	25	45	V
Average forward rectified current	$I_{F(AV)}$	1.5		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	100		A
Maximum instantaneous forward voltage (Note1) @ 0.1 A / @ 1.0 A	V_F	0.360 0.50		V
Maximum reverse current @T_A=25℃ / at rated DC blocking voltage @T_A=100℃	I_R	0.2 6.0		mA
Typical thermal resistance (Note2)	$R_{\Theta JL}$ $R_{\Theta JA}$	25 88		℃/W
Operating temperature range	T_j	- 55 -- +125		℃
Storage temperature range	T_{STG}	- 55 -- +150		℃

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

2.P.C.B. mounted with 0.2×0.2″ (5.0×5.0mm) copper pad areas

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Ratings AND Charactieristic Curves

Fig. 1 — Forward Derating Curve

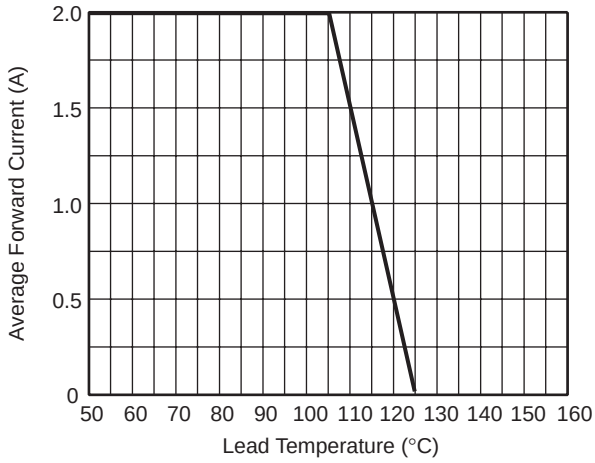

Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

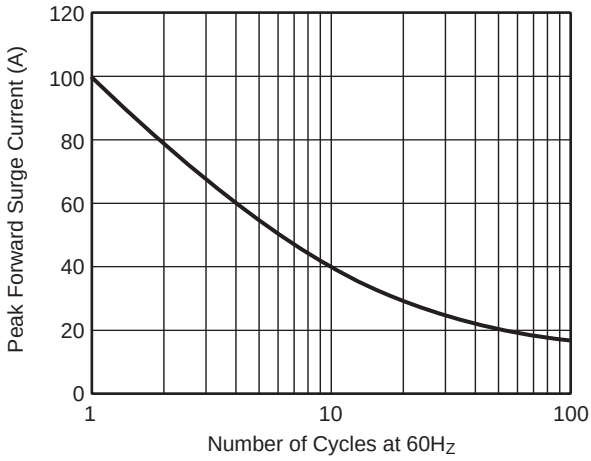

Fig. 3 — Typical Instantaneous Forward Characteristics

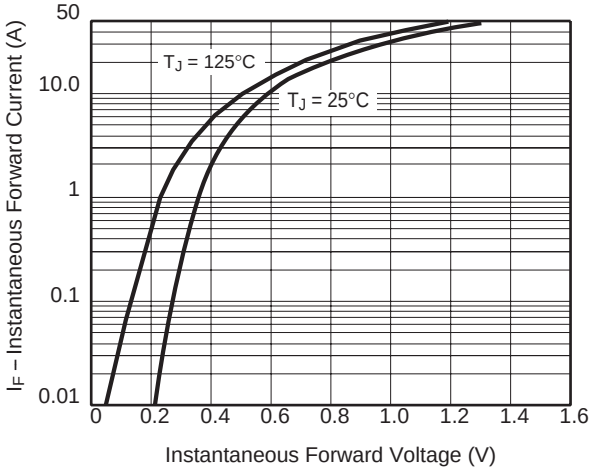

Fig. 4 — Typical Reverse Current Characteristics

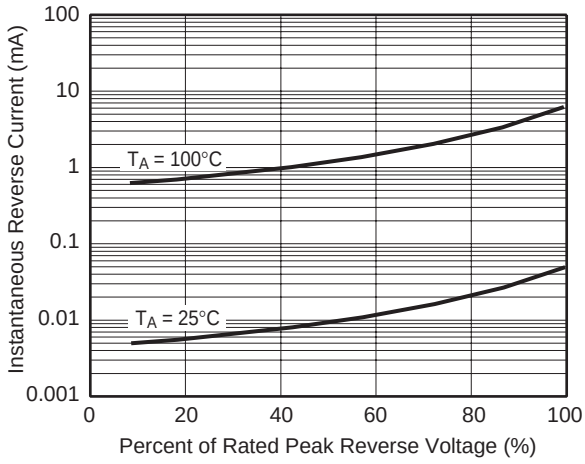

Fig. 5 — Typical Junction Capacitance