SBT110S

SURFACE MOUNT SCHOTTKY BARRIER BRIDGE RECTIFIERS

REVERSE VOLTAGE - **100** Volts
FORWARD CURRENT - **1.0** Ampere

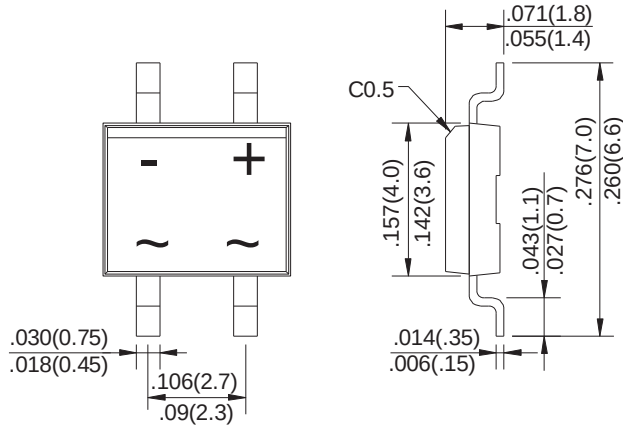
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage,high efficiency.
- High surge capacity.
- Super fast recovery times,high voltage.
- Epitaxial chip construction.
- Lead free in comply with EU RoHS 2002/95/EC directives.

MECHANICAL DATA

- Polarity:Symbol molded on body
- Mounting position :Any

BTS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SBT110S	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Current @T_C=50 ℃	$I_{(AV)}$	1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	30	A
Peak Forward Voltage at 1.0A DC	V_F	0.85	V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Bolcking Voltage @T_J=125℃	I_R	0.5 50	mA
Typical Junction Capacitance Per Element (Note1)	C_J	85	pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	85	℃/W
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

NOTES:1.Measured at1.0MHz and applied reverse voltage of 4.0V DC.

REV. 1, 08-Nov-2012

RATING AND CHARACTERTIC CURVES
SBT110S

FIG.1-FORWARD CURRENT DERATING CURVE

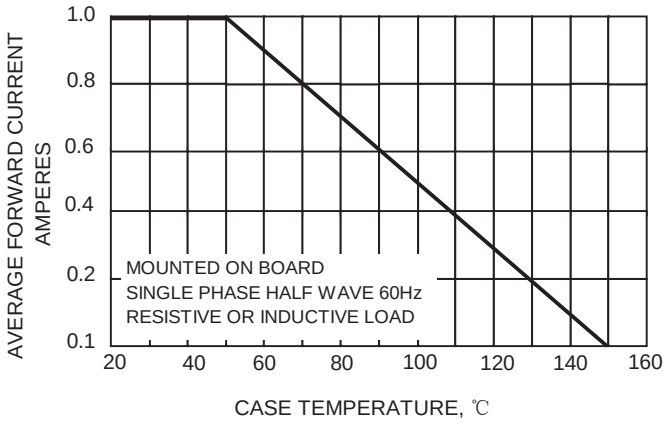


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

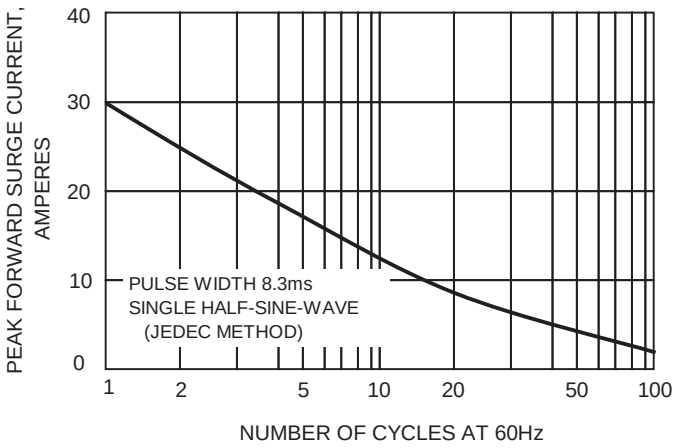


FIG.3-TYPICAL REVERSE CHARACTERISTICS

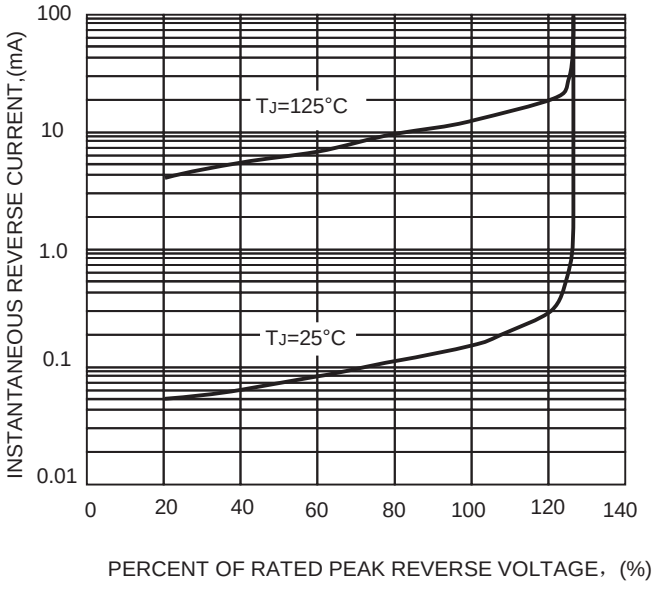


FIG.4-TYPICAL FORWARD CHARACTERISTICS