VI. Bridge Rectifier

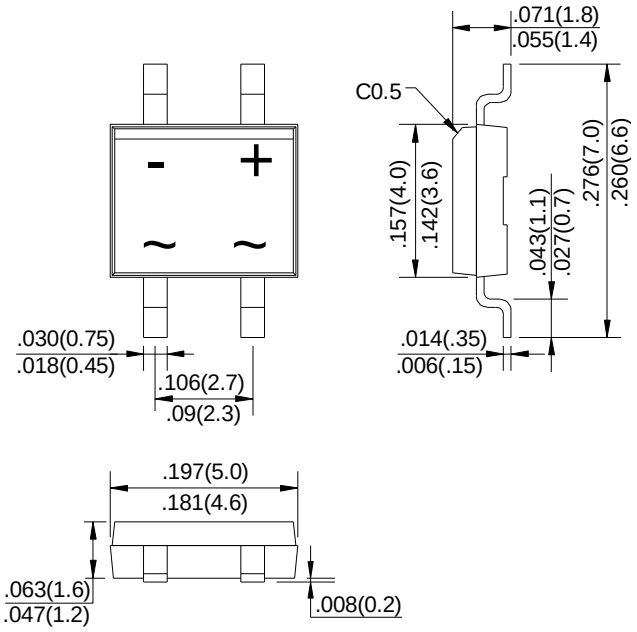
1.0A SMD Glass Passivated Bridge Rectifier (Low Profile Type)
MT105S~MT110S (Package: MTS)

FEATURES

- Glass passivated die construction
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Small size, simple installation

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Polarity symbols marked on body
- Mounting position : Any
- Handling precaution : None



Case: MTS
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristics	Symbol	MT 105S	MT 11S	MT 12S	MT 14S	MT 16S	MT 18S	MT 110S	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Ta = 40℃ (Note 1)	Io	1.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load, (JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage drop per element at 1.0A	V_F	1.1							Volts
Maximum DC reverse current Tj=25℃ at rated DC blocking voltage Tj=125℃	I_R	5.0 500							μA
Typical junction capacitance per element (Note 2)	Cj	10							PF
Typical thermal resistance (Note 3)	Rth-JA	95							℃/ W
Typical thermal resistance (Note 4)	Rth-JC	30							℃/ W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							℃

Notes:
1. Mounted on P.C. Board.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts D.C.
3. Thermal resistance junction to ambient.
4. Thermal resistance junction to case.

Ratings and Characteristic Curves of MT105S~MT110S

FIG.1-FORWARD CURRENT DERATING CURVE

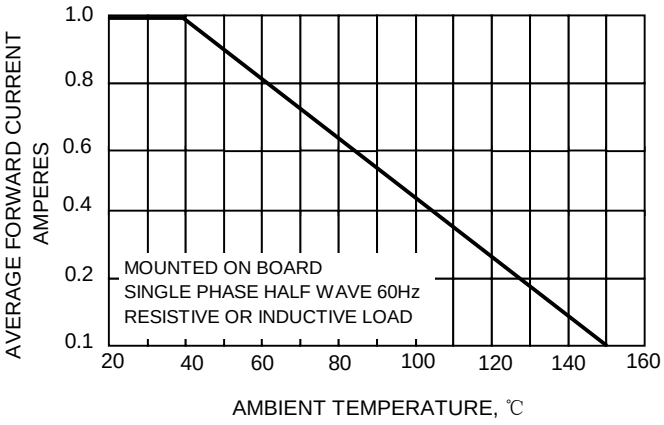


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

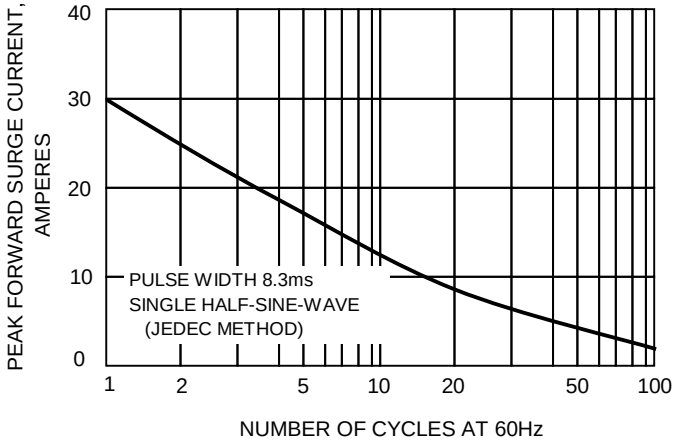


FIG.3-TYPICAL REVERSE CHARACTERISTICS

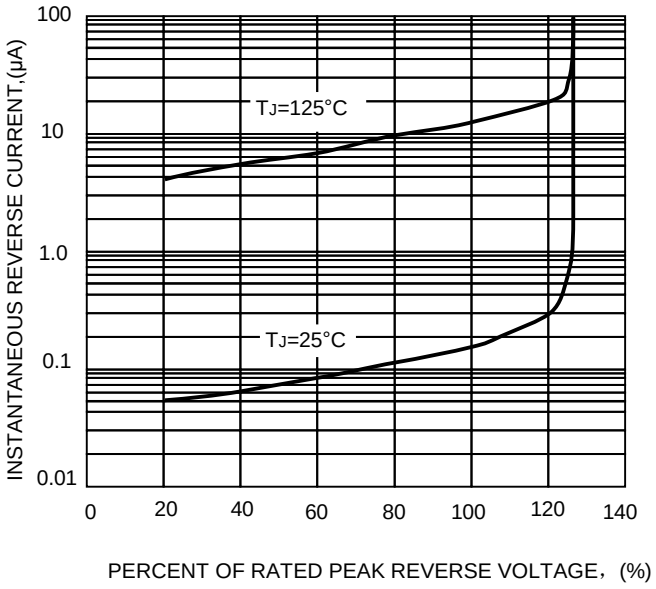


FIG.4-TYPICAL FORWARD CHARACTERISTICS

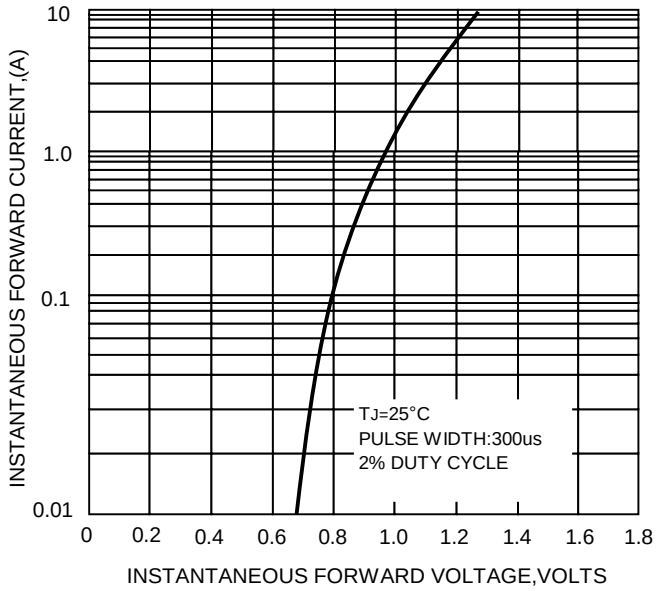


FIG.5-TYPICAL JUNCTION CAPACITANCE