

VI. Bridge Rectifier

0.8A SMD Glass Passivated Bridge Rectifier (Low Profile Type)

MT05S~MT10S

(Package: MTS)

<p>FEATURES</p> <ul style="list-style-type: none"> • Glass passivated die construction • Reliable low cost construction utilizing molded plastic technique • High surge current capability • Small size, simple installation <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : Molded plastic • Polarity : Polarity symbols marked on body • Mounting position : Any • Handling precaution : None 	<p style="text-align: center;">Case: MTS Dimensions in inches and (millimeters)</p>
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Ratings & Electrical Characteristics

Ratings at 25 °C 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 05S	MT 1S	MT 2S	MT 4S	MT 6S	MT 8S	MT 10S	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 $T_a = 40^\circ\text{C}$ (Note 1)	I_o	0.8							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 0.8A DC	V_F	1.1							Volts
Maximum DC reverse current $T_j=25^\circ\text{C}$ at rated DC blocking voltage $T_j=125^\circ\text{C}$	I_R	5.0 500							μA
Typical junction capacitance per element (Note 2)	C_j	15							PF
Typical thermal resistance (Note 3)	R_{th-JC}	75							/ W
Operating junction and storage temperature range	T_j, T_{stg}	-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 case.

Ratings and Characteristic Curves of MT05S~MT10S

FIG.1-FORWARD CURRENT DERATING CURVE

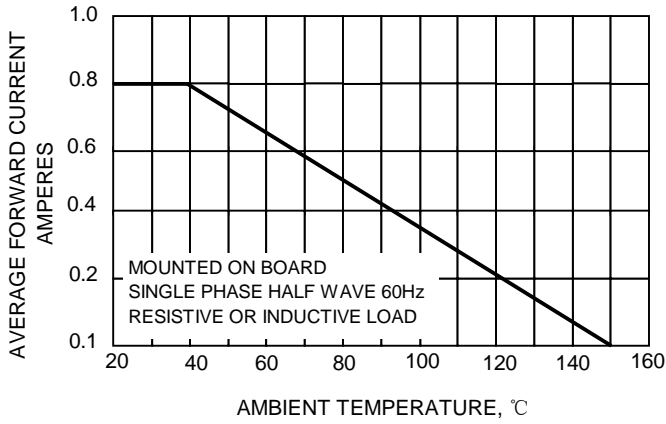


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

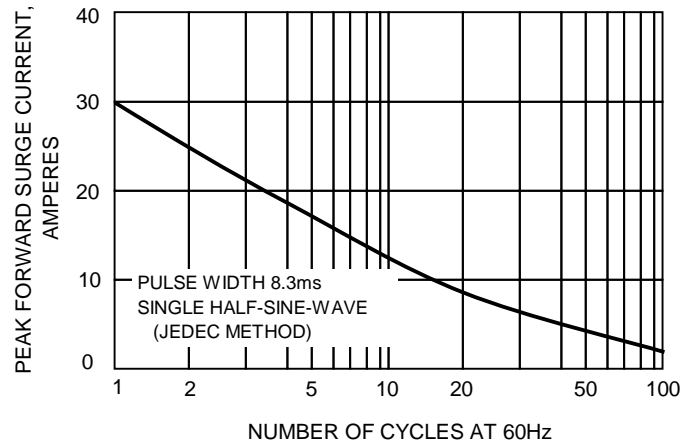


FIG.3-TYPICAL REVERSE CHARACTERISTICS

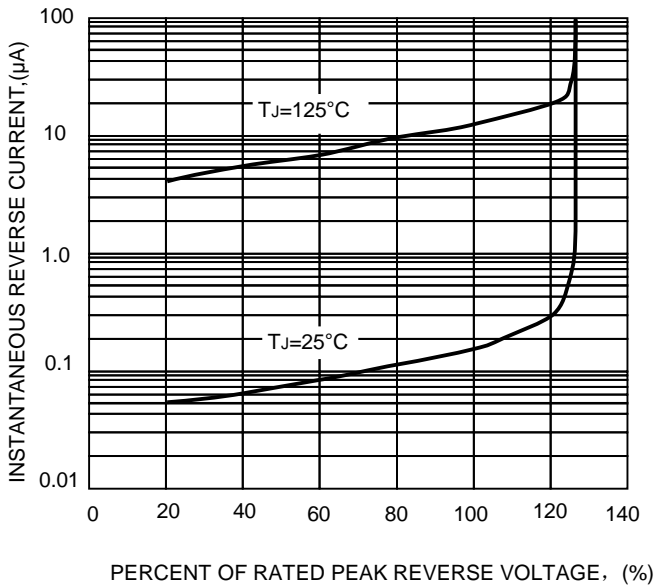


FIG.4-TYPICAL FORWARD CHARACTERISTICS

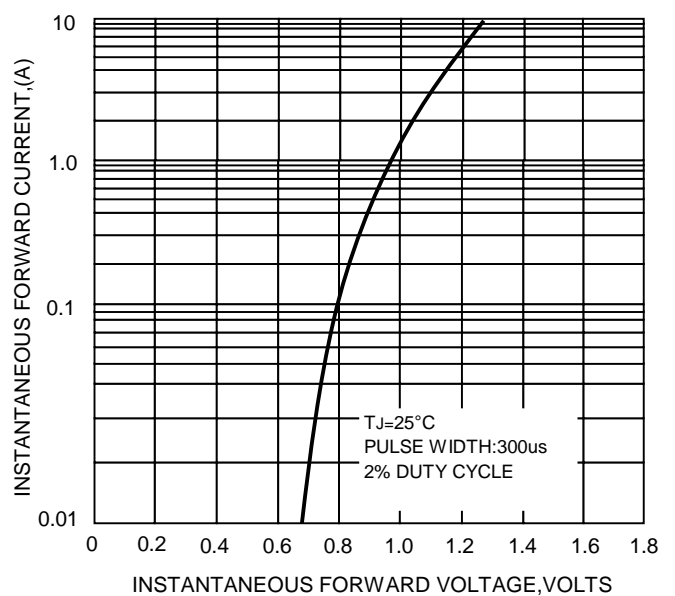


FIG.5-TYPICAL JUNCTION CAPACITANCE

