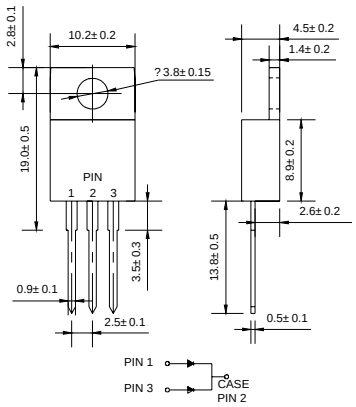
10A05C-10A100C

Plastic Silicon Rectifiers

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 10.0 A

TO-220AB



Dimensions in millimeters

Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned witn Freon,Alcohol,Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

Mechanical Data

- Case:JEDEC TO-220AB,molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.071 ounces,2.006 grams
- Mounting position: Any

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%.

		10A05C	10A10C	10A20C	10A40C	10A60C	10A80C	10A100C	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	10.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T_J=125℃	I_{FSM}	400.0							A
Maximum instantaneous forward voltage @ 5.0 A	V_F	1.0							V
Maximum reverse current @T_A=25℃	I_R	10.0							μA
at rated DC blocking voltage @T_A=100℃		100.0							
Typical junction capacitance (Note1)	C_J	120							pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	10							℃/W
Operating junction temperature range	T_J	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

Ratings AND Charactieristic Curves

FIG.1 -- FORWARD DERATING CURVE

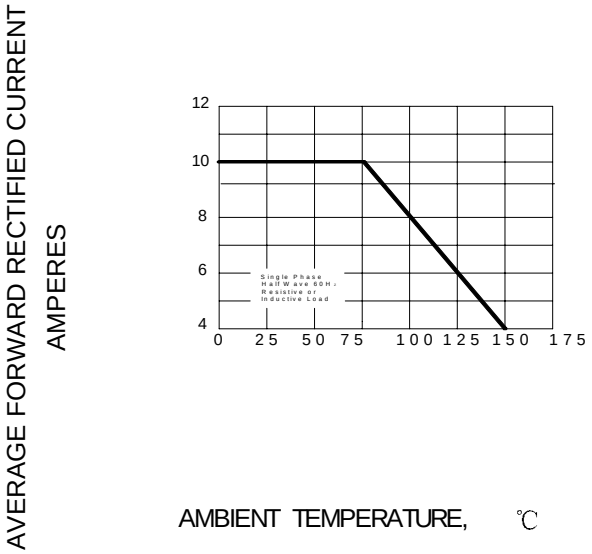


FIG.2 -- TYPICAL FORWARD CHARACTERISTICS

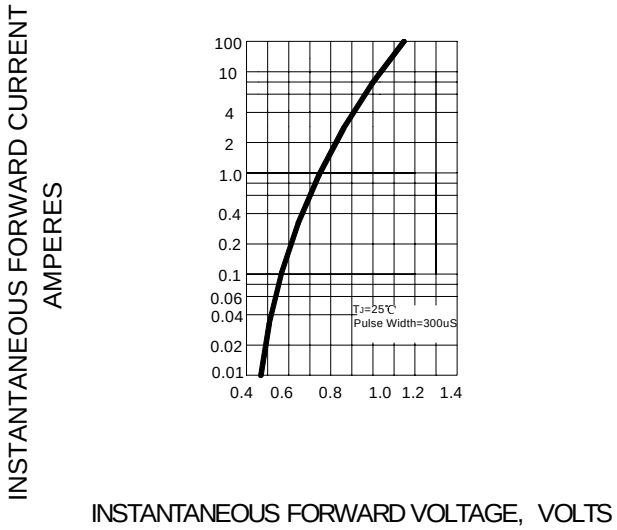


FIG.3 --MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

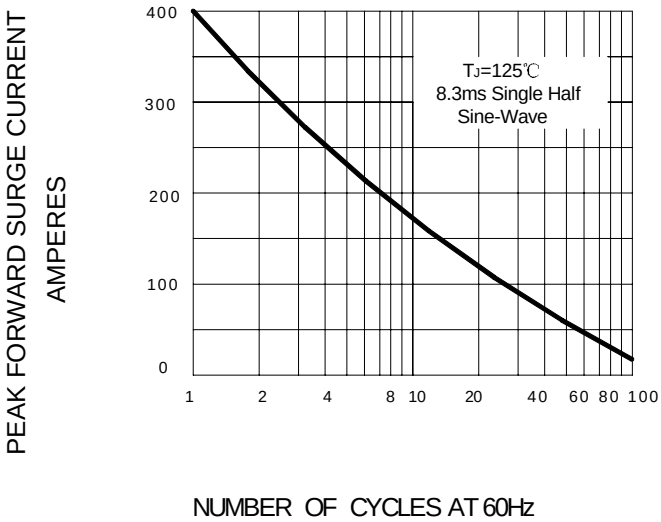
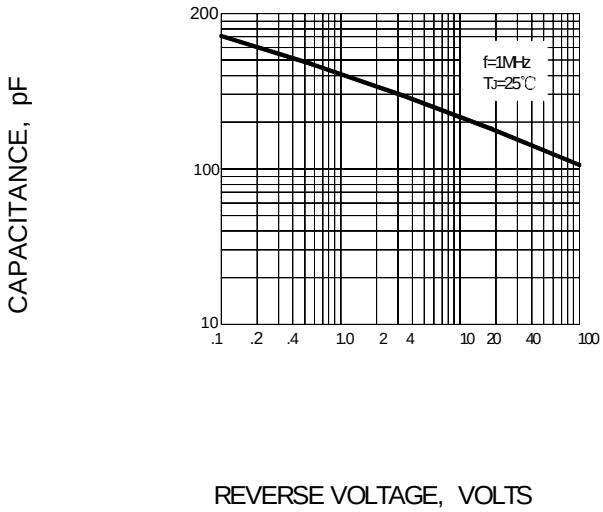



FIG.4 -- TYPICAL JUNCTION CAPACITANCE