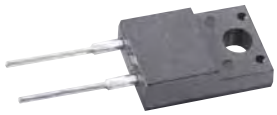
5A10F-5A100F

Plastic Silicon Rectifiers

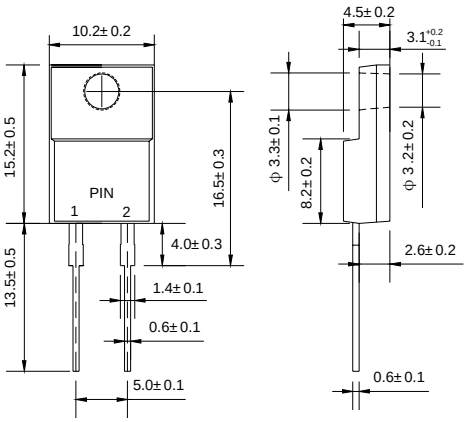
VOLTAGE RANGE: 100 --- 1000 V
CURRENT: 5.0 A

ITO-220AC



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



Dimensions in millimeters

Mechanical Data

- ◇ Case:JEDEC ITO-220AC,molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.056ounces,1.587 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%.

		5A10F	5A20F	5A40F	5A60F	5A80F	5A100F	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_C=100℃	$I_{F(AV)}$	5.0						A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	300						A
Maximum instantaneous forw ard voltage @ 5.0 A	V_F	1.2						V
Maximum reverse current @T_A=25℃	I_R	10						μA
at rated DC blocking voltage @T_A=100℃		100						
Typical junction capacitance (Note1)	C_J	80						pF
Typical thermal resistance (Note2)	$R_{\theta JC}$	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 case.

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Ratings AND Charactieristic Curves

FIG.1 – FORWARD DERATING CURVE

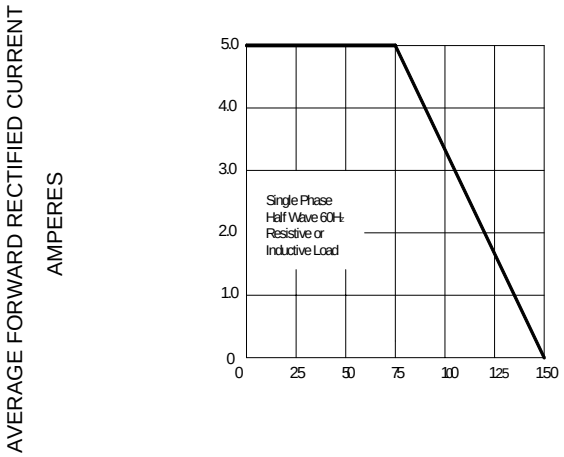

FIG.2 – TYPICAL FORWARD CHARACTERISTICS

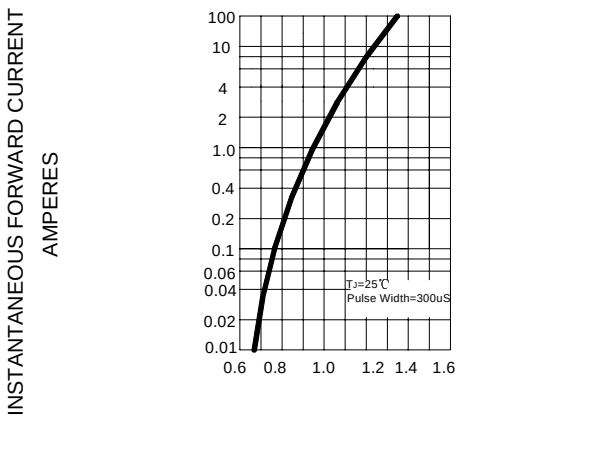

FIG.3 –MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

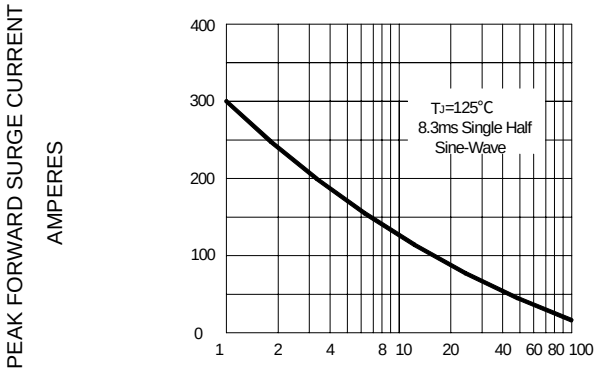

FIG.4 – TYPICAL JUNCTION CAPACITANCE

