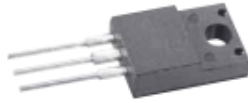


# FML-22S

Super Fast Rectifiers

**VOLTAGE RANGE: 200 V**

**CURRENT: 10 A**



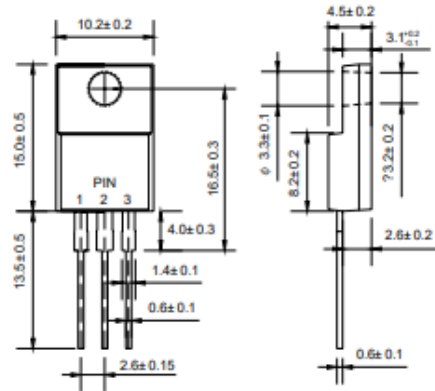
## ITO-220AB

### Features

- ◇ Metal-Semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

### Mechanical Data

- ◇ Case: JEDEC ITO-220AB
- ◇ Polarity: As marked
- ◇ Weight: 0.06 ounce, 1.67 gram
- ◇ Mounting position: Any



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 50 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		FML- 22S	UNITS
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	200	V
Maximum RMS voltage	V <sub>RMS</sub>	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	V
Maximum average forward rectified current @T <sub>C</sub> =100°C	I <sub>F(AV)</sub>	10	A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load	I <sub>FSM</sub>	65	A
Maximum instantaneous forward voltage (I <sub>F</sub> =5.0A)	V <sub>F</sub>	0.98	V
Maximum reverse current @T <sub>J</sub> =25°C at rated DC blocking voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	0.25 1.0	mA
Maximum reverse recovery time (Note1)	t <sub>rr</sub>	30	ns
Typical thermal resistance (Note2)	R <sub>θJC</sub>	4.0	°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 ---- + 150	°C
Storage temperature range	T <sub>STG</sub>	- 55 ---- + 150	°C

NOTE: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.

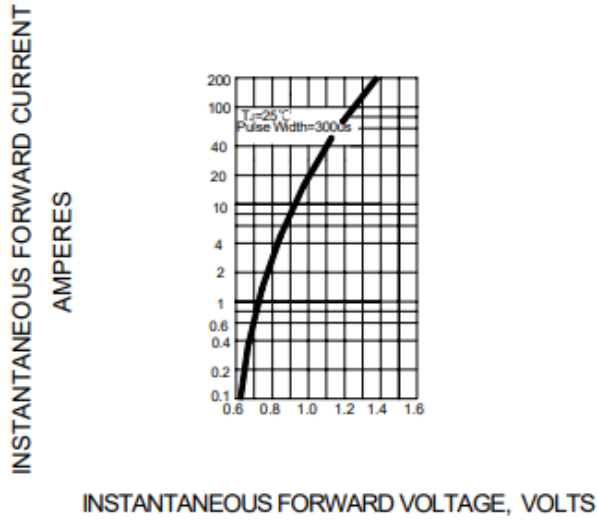
2. Thermal resistance junction to case.

# FML-22S

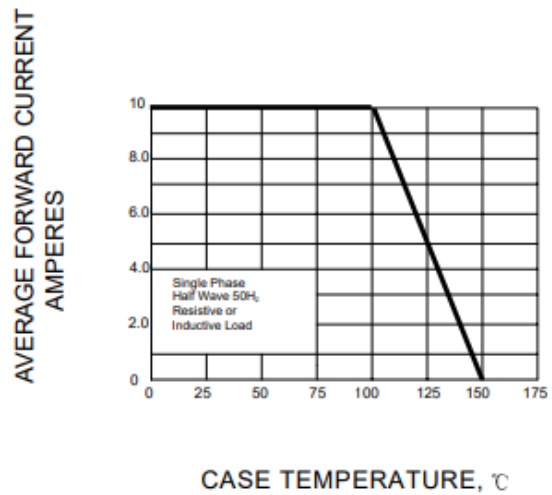
Super Fast Rectifiers

## Ratings AND Characteristic Curves

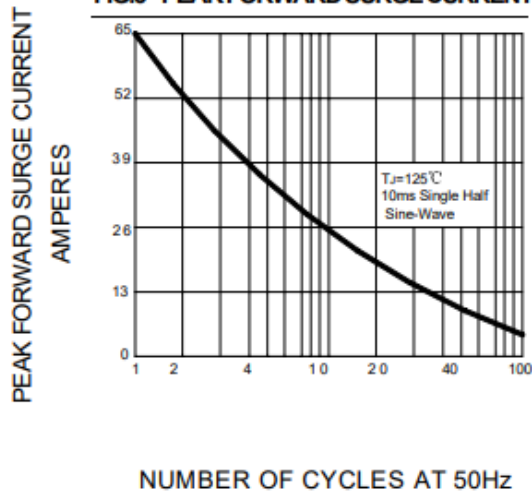
**FIG.1 – TYPICAL FORWARD CHARACTERISTIC**



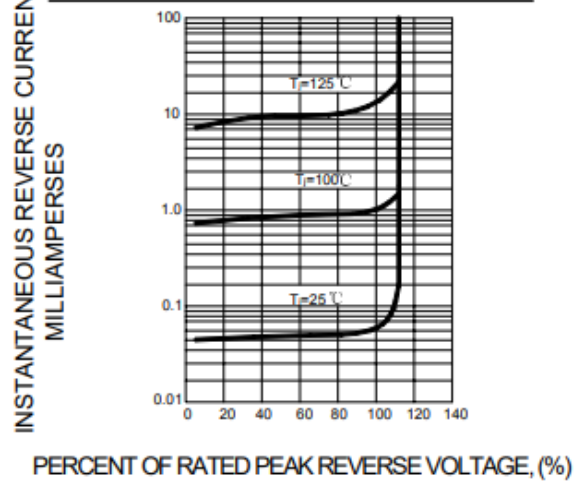
**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – PEAK FORWARD SURGE CURRENT**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



**FIG.5 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**

