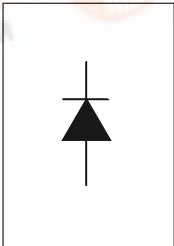


Preliminary Data Sheet I2155 05/98

International
IOR Rectifier

QUIETIR Series
70EPF..

FAST SOFT RECOVERY
RECTIFIER DIODE



$I_{F(RMS)}$	= 135A
V_F	< 1.4V @ 85A
t_{rr}	= 95ns
V_{RRM}	800 to 1200V

Description/Features

The 70EPF.. fast soft recovery **QUIETIR** rectifier series has been optimized for combined short reverse recovery time and low forward voltage drop.

The glass passivation ensures stable reliable operation in the most severe temperature and power cycling conditions.

Available in the new **PowIRtab™** package, this new series is suitable for a large range of applications combining excellent die to footprint ratio and sturdiness connectivity for use in high current environments.

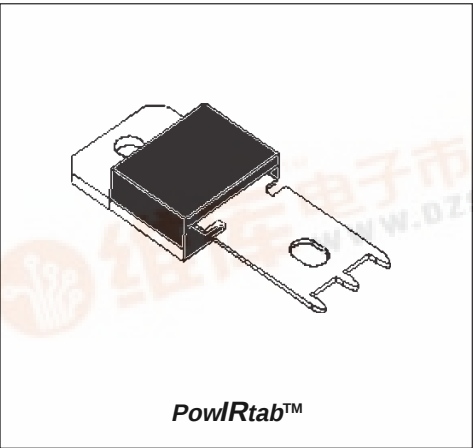
Typical applications are both:

- Output rectification and freewheeling in inverters, choppers and converters
- Input rectifications where severe restrictions on conducted EMI should be met.

Major Ratings and Characteristics

Characteristics	70EPF..	Units
$I_{F(AV)}$ Rect. Conduction 50% duty Cycle @ $T_C = 80^\circ C$	85	A
$I_{F(RMS)}$	135	A
V_{RRM} range	800 to 1200	V
I_{FSM}	700	A
V_F @ 85A, $T_J = 25^\circ C$	1.4	V
t_{rr} @ 1A, -100A/ μs	95	ns
T_J range	-40 to 150	$^\circ C$

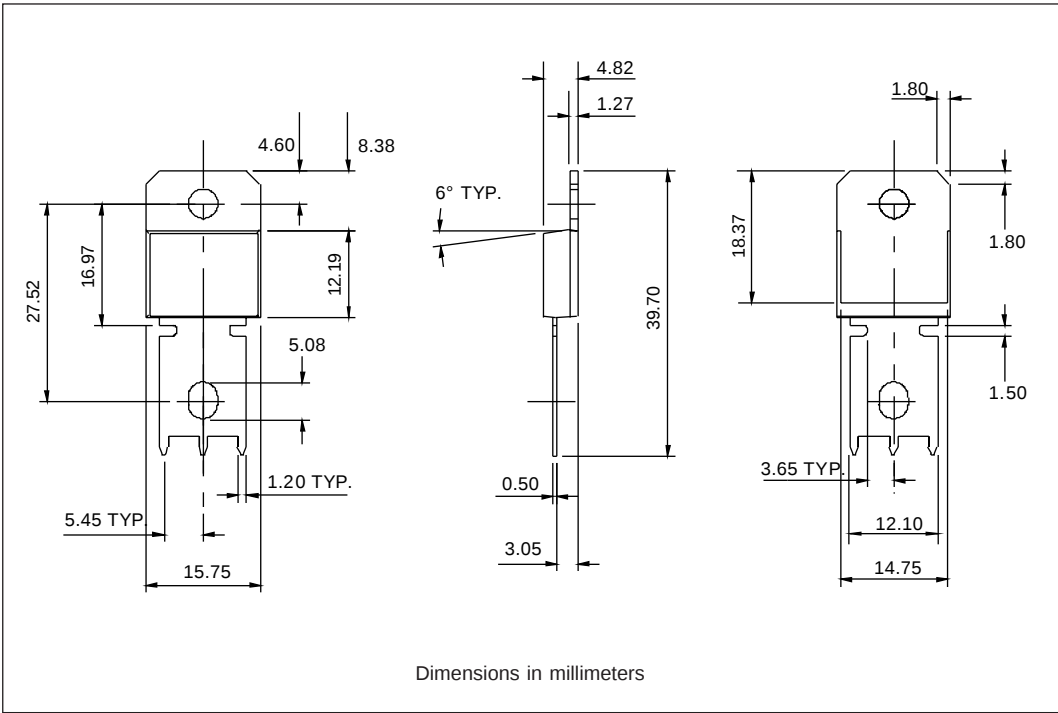
Package Outline



PowIRtab™



Outline Table



Ordering Information Table

Device Code				
70	E	P	F	12
①	②	③	④	⑤
1	- Current Rating			
2	- Circuit Configuration:			
	E = Single Diode			
3	- Package:			
	P = PowIRtab™			
4	- Type of Silicon:			
	F = Fast Recovery			
5	- Voltage code: Code x 100 = V _{RRM}			
				08 = 800V
				10 = 1000V
				12 = 1200V

Base Cathode

2

1 Anode 3 Anode