

Pb Free Plating Product

## FFPF20UP20DP



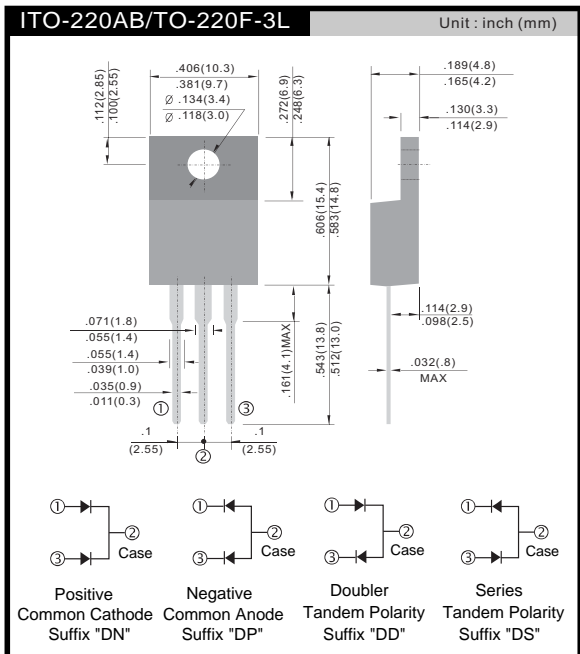
20Amperes,200Volts Insulated Common Anode Ultra Fast Soft Recovery Epitaxial Diodes

## APPLICATION

- Freewheeling, Snubber, Clamp
- Inversion Welder
- PFC
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- UPS

## PRODUCT FEATURE

- Ultrafast Recovery Time
- Soft Recovery Characteristics
- 175 Operating Junction Temperature
- Low Forward Voltage
- High Surge Current Capability
- Low Leakage Current



## GENERAL DESCRIPTION

FFPF20UP20DP using latest FRED FAB process(planar passivation pellet) with ultrafast soft recovery characteristics.

Absolute Maximum Ratings				
Parameter	Symbol	Test Conditions	Values	Units
Repetitive peak reverse voltage	VRRM		200	V
Continuous forward current	IF(AV)	Tc =110°C	20	A
Single pulse forward current	IFSM	Tc =25°C	200	
Maximum repetitive forward current	IFRM	Square wave, 20KHZ	50	
Operating junction	Tj		175	°C
Storage temperatures	Tstg		-55 to +175	°C

### Electrical characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ.	Max.	Units
Breakdown voltage Blocking voltage	$V_{BR}$ , $V_R$	$I_R=100\mu A$	200			V
Forward voltage (Per Diode)	$V_F$	$I_F=10 A$		0.88	0.96	
		$I_F=10 A, T_j=125^\circ C$		0.75	0.86	
Reverse leakage current(Per Diode)	$I_R$	$V_R=V_{RRM}$			10	$\mu A$
		$T_j=150^\circ C, V_R=200V$			100	
Reverse recovery time(Per Diode)	$t_{rr}$	$I_F=0.5A, I_R=1A, I_{RR}=0.25A$		25	35	ns
		$I_F=1A, V_R=30V, di/dt=200A/us$		17	30	

### Thermal characteristics

Paramter	Symbol	Typ	Units
Junction-to-Case	$R_{\theta JC}$	2.0	$^\circ C/W$

### Electrical performance (typic)

