

Pb Free Plating Product

## XS2206



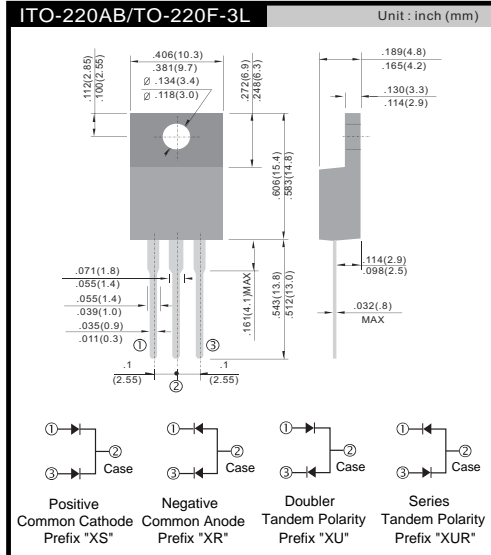
20Amperes,600Volts Insulated Common Cathode Ultra Fast Recovery Rectifiers

### 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
- Low Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Low Leakage Current



### GENERAL DESCRIPTION

XS2206 using the latest FRED FAB process(planar passivation chip) with ultrafast and soft recovery characteristic.

Absolute Maximum Ratings				
Parameter	Symbol	Test Conditions	Values	Units
Repetitive peak reverse voltage	VRRM		600	V
Continuous forward current (total device)	IF(AV)	Tc =110°C	20	A
Single pulse forward current (total device)	IFSM	Tc =25°C	160	
Maximum repetitive forward current	IFRM	Square wave, 20kHz	60	
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	$V_{BR}$ , $V_R$	$I_R=100\mu A$	600			V
Forward voltage (Per Diode)	$V_F$	$I_F=10A$		1.35	1.60	
		$I_F=10A, T_j=125^\circ C$		1.10	1.40	
Reverse leakage current(Per Diode)	$I_R$	$V_R=V_{RRM}$			20	$\mu A$
		$T_j=150^\circ C, V_R=600V$			200	
Reverse recovery time(Per Diode)	$t_{rr}$	$I_F=0.5A, I_R=1A, I_{RR}=0.25A$		35	45	ns
		$I_F=1A, V_R=30V, di/dt=200A/us$		27	35	

**Thermal characteristics**

Paramter	Symbol	Typ	Units
Junction-to-Case	$R_{\theta JC}$	3.0	$^\circ C/W$

**Electrical performance (typical)**

