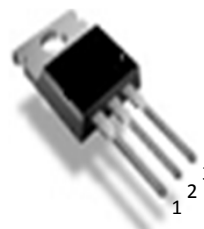




Major ratings and characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	5×2	A
V_{RRM}	100	V
$V_F@ 5\text{ A}, T_J=125^\circ\text{C}$	0.64	V , typ.
T_J Operating Junction Temperature	-65 to +175	$^\circ\text{C}$

TO-220AB



ITO-220AB

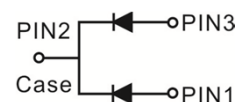


Features

- * Ultra-Low Forward Voltage Drop
- * Reliable High Temperature Operation
- * Softest, fast switching capability
- * 175 $^\circ\text{C}$ Operating Junction Temperature
- * Lead Free Finish, RoHS Compliant

Typical Applications

Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications



Mechanical

- * Molded Plastic Low profile TO-220AB / ITO-220AB
- * Device Weight : 0.07 ounces (1.96grams) - TO-220AB
0.06 ounces (1.74grams) - ITO-220AB
- * Mounting Torque : 10 in-lbs maximum.

Maximum Ratings Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol		Units
DC Blocking Voltage	V_{RM}	100	Volts
Working Peak Reverse Voltage	V_{RWM}		
Peak Repetitive Reverse Voltage	V_{RRM}		
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	I_o	10	Amps
Peak Forward Surge Current - 1/2 60hz	I_{FSM}	120	Amps
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I_{RRM}	1	Amps
Typical Thermal Resistance (per leg) Package = TO-220AB ITO-220AB	$R\theta_{Jc}$	2 4	$^\circ\text{C} / \text{W}$
Isolation voltage (ITO-220 only)	V_{AC}	1500	V
Maximum Rate of Voltage Change (at Rated V_R)	dv/dt	10000	V/uS
Operating Junction Temperature	T_J	- 65 to +175	$^\circ\text{C}$
Storage Junction Temperature	T_{STG}	- 65 to +175	



Electrical Characteristics - (per leg) ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Test Conditions	Symbol	Typ.	Max.	Units
Instantaneous Forward Voltage	$I_F = 5\text{ A}$	V_F^*	----	0.82	Volts
			0.64	0.71	
Instantaneous Reverse Current	At V_{RM}	IR	----	100	μA
			----	10	mA

* Pulse width < 300 μs , Duty cycle < 2%

Patings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise specified)

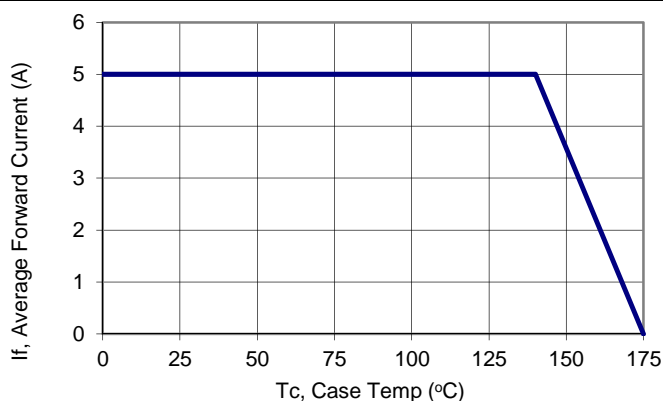


Figure 1: Current Derating, Case

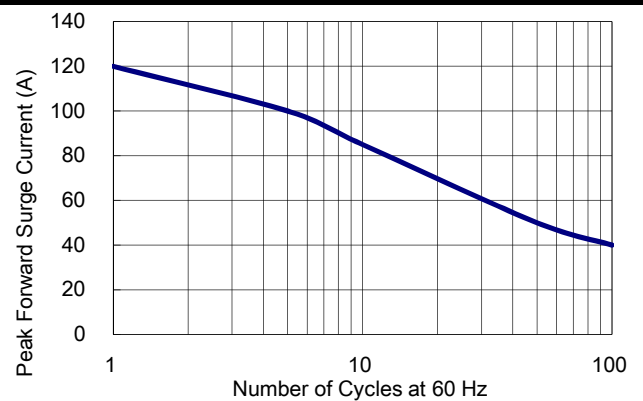


Figure 2: Maximum Repetitive Surge Current

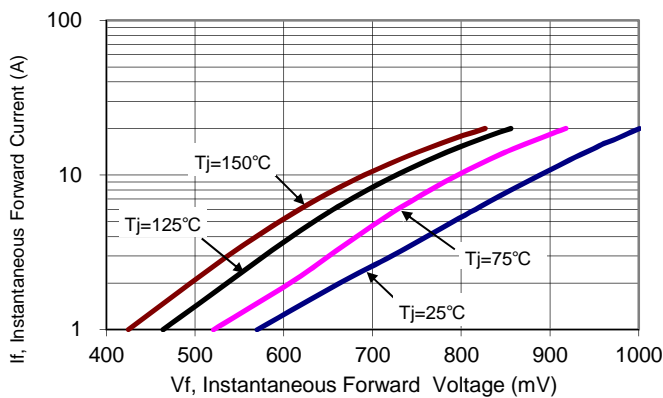


Figure 3: Typical Forward Voltage

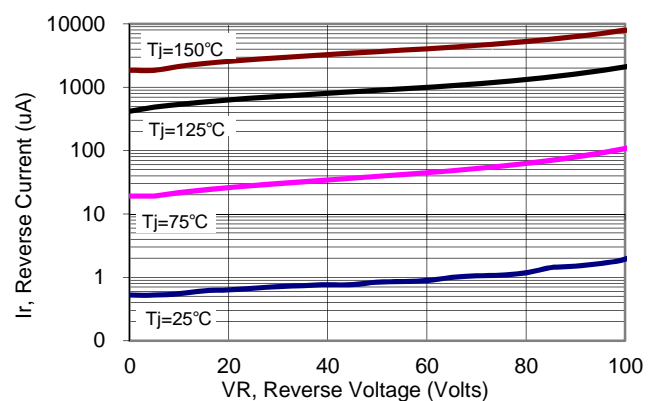


Figure 4: Typical Reverse Current

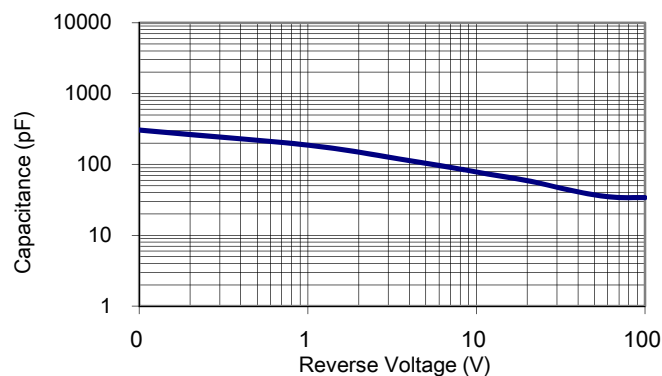
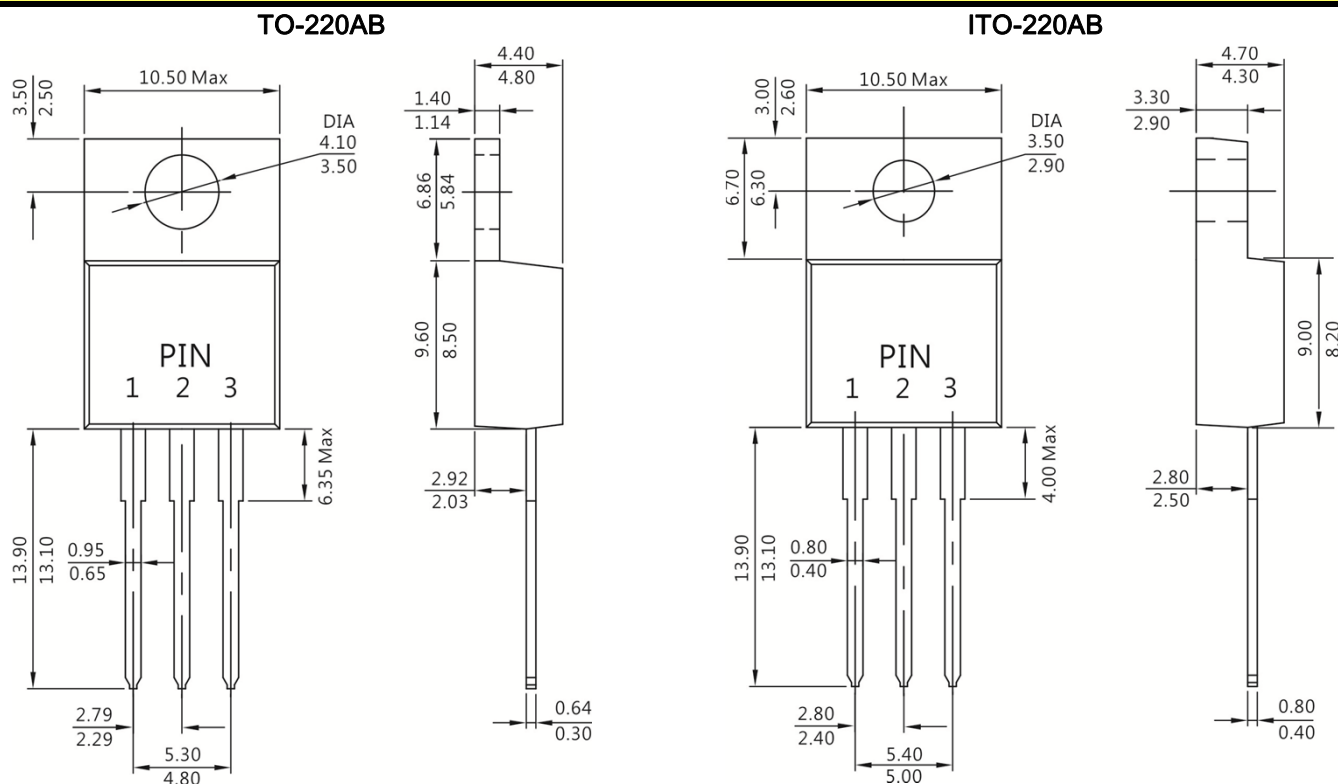


Figure 5: Typical Junction Capacitance



Package Outline Dimensions millimeters



Ordering information

Part Number	Package	Delivery mode
PFR10100CT	TO-220AB	50 pieces / tube
PFR10100CTF	ITO-220AB	50 pieces / tube

Note: For Halogen Free molding compound, add "H" suffix to part number above.

Marking information

PFC
PFR10100CT
YYWW ABH

PFR10100CT = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

AB = Assembly code

H = Halogen Free (N/A = common molding compound)

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