



PFC Device Corporation

PFR20L45CT
PFR20L45CTF
PFR20L45CTI
PFR20L45CTB

20A 45V MOS Schottky Rectifier

Major ratings and characteristics

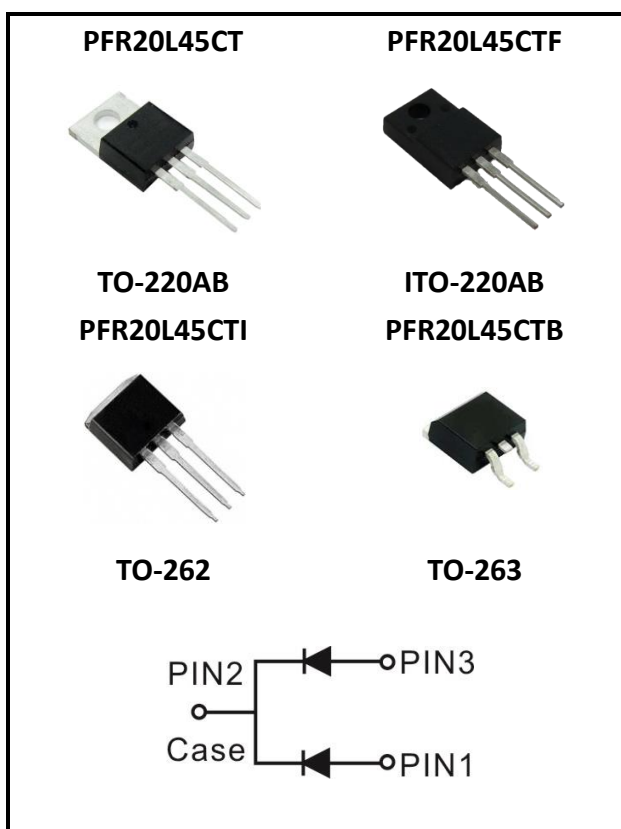
Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	10 × 2	A
V_{RRM}	45	V
$V_F@ 10A, T_J=125^{\circ}C$	0.46	V, typ.
T_J Operating Junction Temperature	-65 to +150	$^{\circ}C$

Features

- Low Forward Voltage Drop
- Reliable High Temperature Operation
- Softest, fast switching capability
- 150 $^{\circ}C$ Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

Typical Applications

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



Maximum Ratings Characteristics

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

Electrical Characteristics - (per leg)

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

* Pulse width < 300 μ S, Duty cycle < 2%

2. Characteristics Curves

Ratings and Characteristics Curves

(TA = 25°C unless otherwise specified)

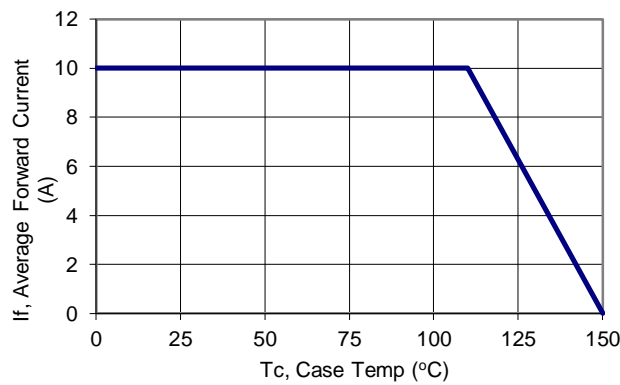


Figure 1: Current Derating, Case

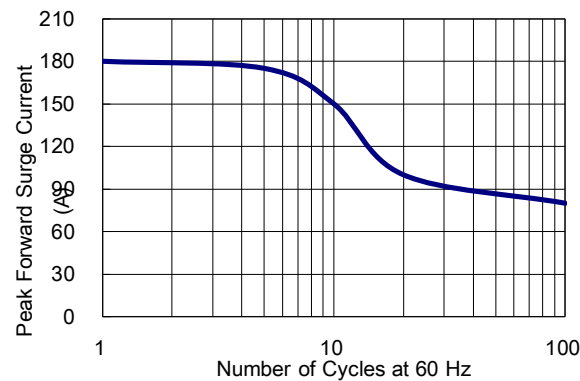


Figure 2: Maximum Repetitive Surge Current

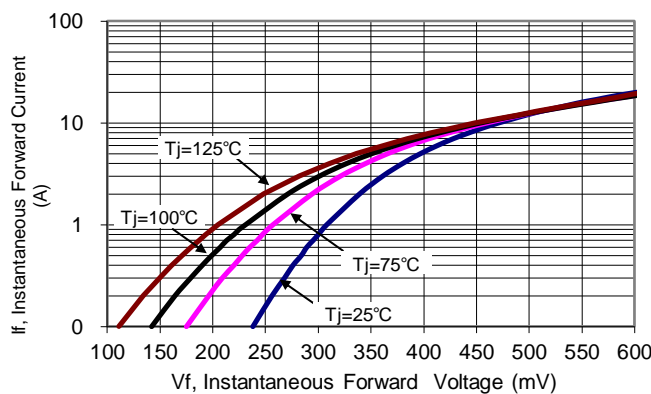


Figure 3: Typical Forward Voltage

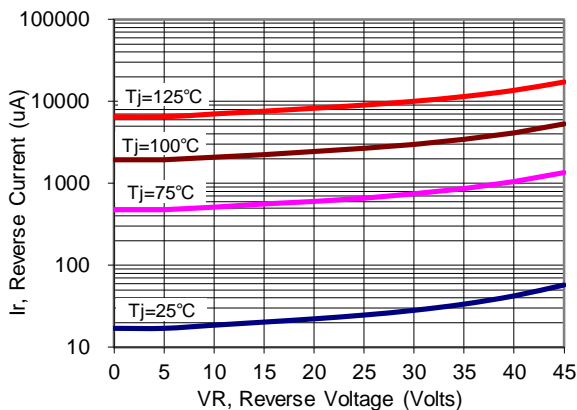


Figure 4: Typical Reverse Current

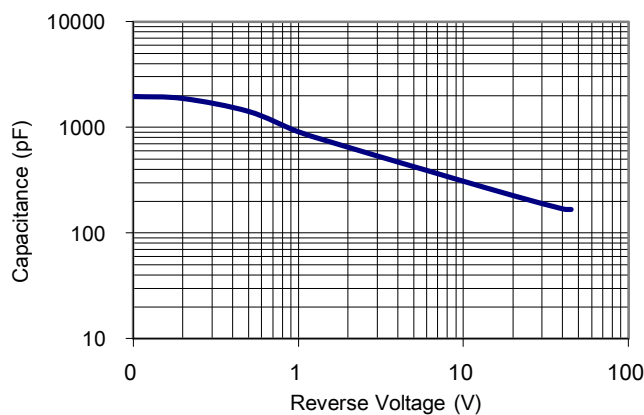


Figure 5: Typical Junction Capacitance

3. Marking information

Top Marking Rule

PFC PFR
20L45CT
YYWW AB SH

PFR20L45CT = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

AB = Assembly code

S = Series Number

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

PFC PFR
20L45CTF
YYWW AB SH

PFR20L45CTF = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

AB = Assembly code

S = Series Number

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

PFC PFR
20L45CTI
YYWW AB SH

PFR20L45CTI = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

AB = Assembly code

S = Series Number

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

PFC PFR
20L45CTB
YYWW AB SH

PFR20L45CTB = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

AB = Assembly code

S = Series Number

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

5. Ordering information

Part Number	Package	Delivery mode
PFR20L45CT	TO-220AB	50 pieces / tube
PFR20L45CTF	ITO-220AB	50 pieces / tube
PFR20L45CTI	TO-262	50 pieces / tube
PFR20L45CTB	TO-263	800 pieces / 13" diameter reel

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

Mechanical

- Molder Plastic: UL Flammability Classification Rating 94V-0
- Device Weight : 0.07 ounces (1.96grams) - TO-220AB
0.06 ounces (1.74grams) - ITO-220AB
0.05 ounces (1.45 grams) - TO-262
0.04 ounces (1.16 grams) - TO-263
- Mounting Torque : Recommended 4~5 kg-cm.