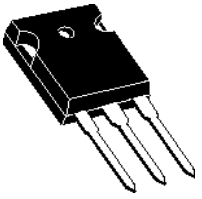
Data Sheet

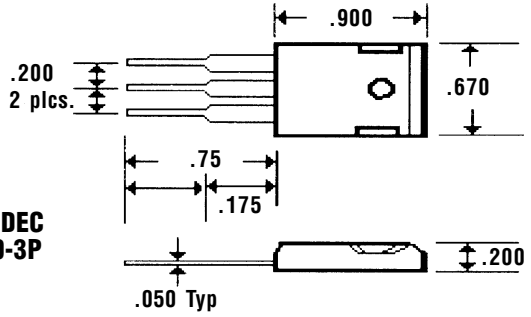
50 Amp SCHOTTKY BARRIER RECTIFIERS

FBR5030...5060 Series

Description



Mechanical Dimensions



Features

- HIGH CURRENT CAPABILITY WITH LOW V_F
- HIGH SURGE VOLTAGE AND TRANSIENT PROTECTION
- HIGH EFFICIENCY w/LOW POWER LOSS
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	FBR5030 . . . 5060 Series						Units
Maximum Ratings	**FBR5030**	**FBR5035**	**FBR5040**	**FBR5045**	**FBR5050**	**FBR5060**	
Peak Repetitive Reverse Voltage...V_{RRM}	30	35	40	45	50	60	Volts
Working Peak Reverse Voltage...V_{RWM}	30	35	40	45	50	60	Volts
DC Blocking Voltage...V_{DC}	30	35	40	45	50	60	Volts
RMS Reverse Voltage...V_R(rms)	21	24	28	31	35	42	Volts
Average Forward Rectified Current...I_O @ T_C = 110°C V_R (equiv.) < = $0.2V_{R(DC)}$	50						Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} @ Rated Load Conditions, ½ Sine Wave, Single Phase, 60HZ	500						Amps
Forward Voltage...V_F @ I_F = 25 Amps	< .65 >			< .70 >			Volts
DC Reverse Current...I_R @ Rated DC Blocking Voltage T_C = 25°C	10						mAmps
T_C =125°C	< 100 >			< 150 >			mAmps
Operating & Storage Temperature Range...T_J, T_{STRG}	-65 to 150						°C

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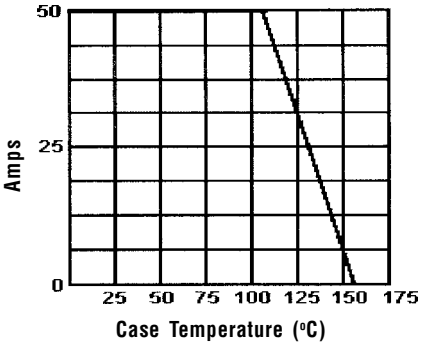
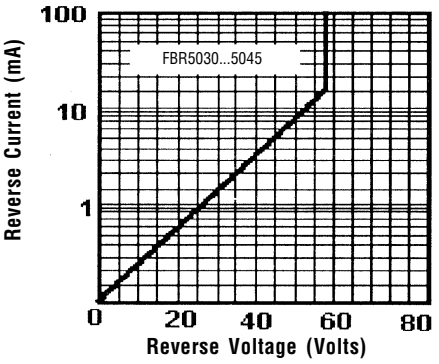
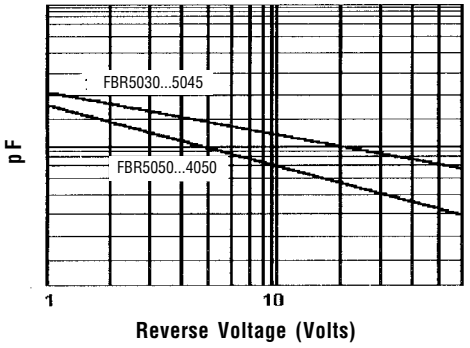
Forward Current Derating Curve



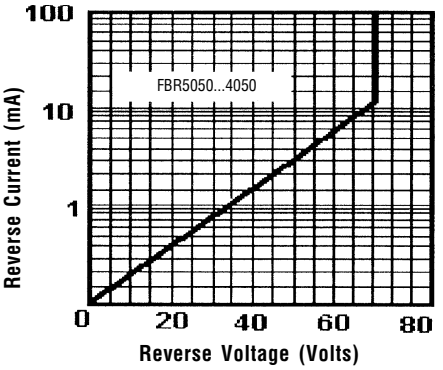
Typical Reverse Characteristics



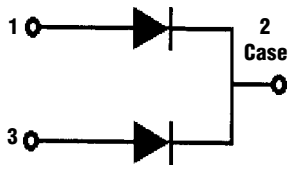
Typical Junction Capacitance



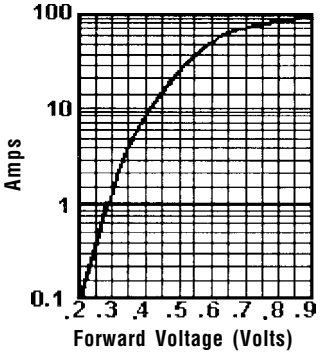
Typical Reverse Characteristics



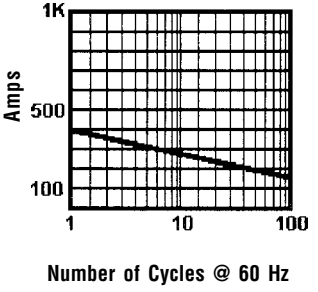
Common Cathode, Suffix "C"



Typical Forward Characteristics



Peak Forward Surge Current



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

NOTES: 1. Measured @ 1 MHZ and applied reverse voltage of 4.0V.
2. Thermal Resistance Junction to Case, Jedec Method.
3. When Mounted to heat sink, from body.