HBR20150FCT

Schottky Barrier Rectifier Diode

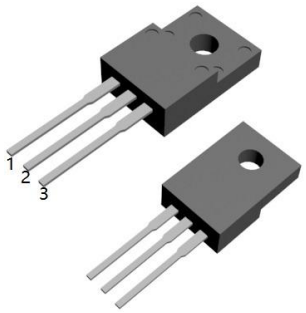
20A,150V

FEATURE

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed

260°C /10seconds, 0.25"(6.35mm)from case

TO-220F-3L



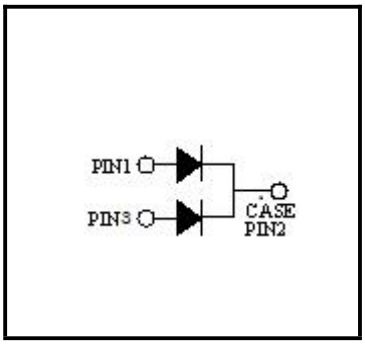
MECHANICAL DATA

- Case: Molded with UL-94 Class V-0 recognized

Flame Retardant Epoxy

- Mounting position: any

Parameter	Values	Unit
$I_{F(AV)}$	20	A
V_{RRM}	150	V
T_J	175	℃
V_F(max)	0.88	V
I_{FSM}	150	A



Ordering Code	Marking	Package	Packaging
HBR20150FCT	HBR20150FCT	TO-220F-3L	Tube

Absolute Maximum Ratings(T_C=25℃,unless otherwise noted)

Parameter	Symbol	Values			Unit	Note/Test Conditions
		Min	Typ	Max		
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	-	-	150	V	-
Maximum RMS Voltage	V_{RMS}	-	-	105	V	-
Maximum DC blocking Voltage	V_{DC}	-	-	150	V	-
Maximum Average Forward Rectified Current	$I_{F(AV)}$	-	-	10 20	A	Per Leg Total device,T_C=100°C
Non-Repetitive Forward Surge Current Per Leg	I_{FSM}	-	-	150	A	T_C=25℃, t_p=8.3ms,Half Sine Wave
Typical Junction Capacitance	C_J	-	540	-	pF	Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55	-	175	℃	-

Thermal Characteristics

Parameter	Symbol	Values			Unit	Note/Test Conditions
		Min	Typ	Max		
Thermal resistance , Channel to Case	$R_{th(ch-c)}$	-	-	3.5	℃/W	-

Electrical Characteristics-(per leg)(T_C=25℃,unless otherwise noted)

Parameter	Symbol	Values			Unit	Note/Test Conditions
		Min	Typ	Max		
Reverse Breakdown Voltage	V_{RRM}	150	-	-	V	I_R=100μA
Forward Voltage Drop	V_F	-	0.68	-	V	I_F=2A,T_J=25℃
		-	0.52	-		I_F=2A,T_J=125℃
Forward Voltage Drop	V_F	-	0.75	-	V	I_F=5A,T_J=25℃
		-	0.60	-		I_F=5A,T_J=125℃
Forward Voltage Drop	V_F	-	0.80	0.88	V	I_F=10A,T_J=25℃
		-	0.67	0.80		I_F=10A,T_J=125℃
Reverse Leakage Current	I_R	-	0.03	20	μA	V_R=150V,T_J=25℃
		-	112	5000		V_R=150V,T_J=125℃

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

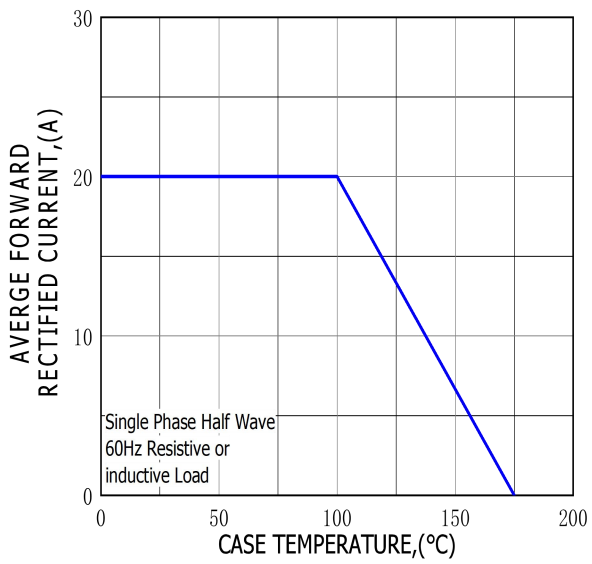


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

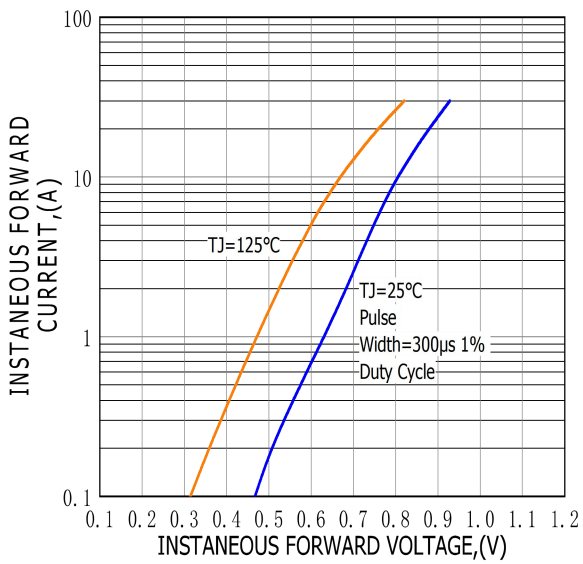


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

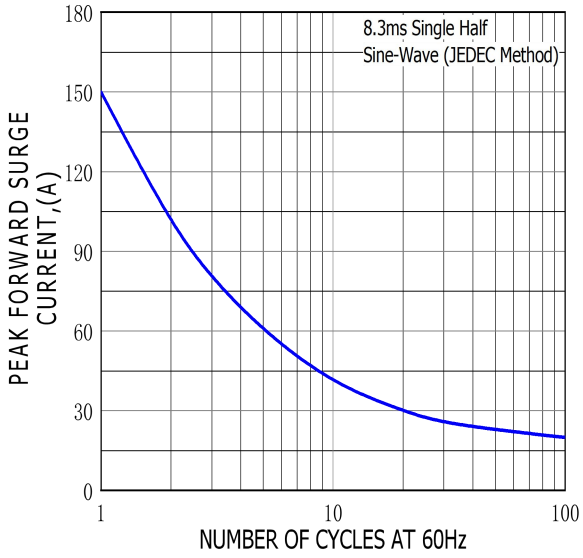
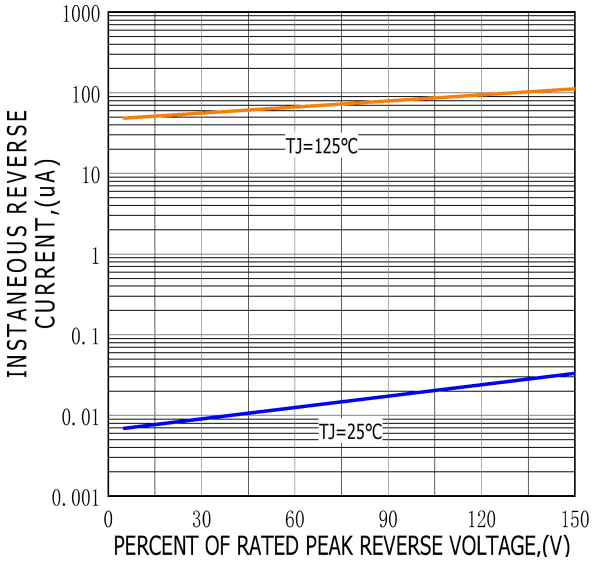


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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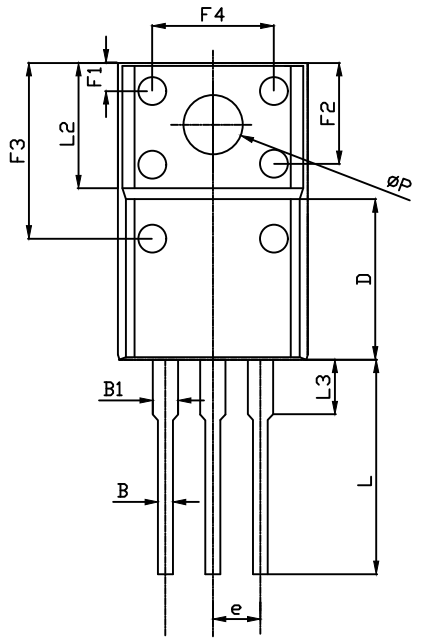
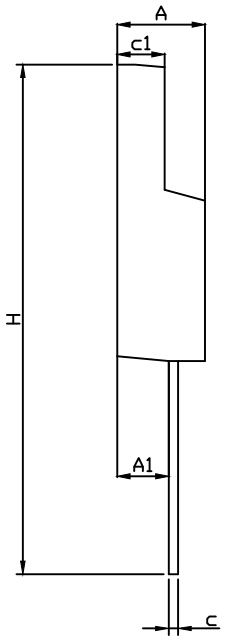
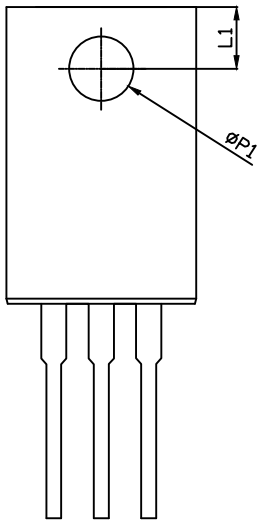
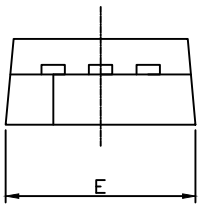
CHONGQING PINGWEI ENTERPRISE CO.,LTD

TO-220F-3L PACKAGE OUTLINE



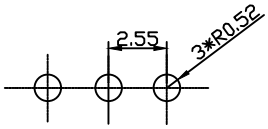






	MIN	NOM	MAX
A	4.40	4.60	4.80
A1	2.63	2.76	2.89
B	0.75	0.80	0.90
B1	1.12	1.27	1.42
c	0.40	0.50	0.60
c1	2.60	2.70	2.80
D	7.50	7.80	8.10
e	-	2.55REF	-
E	9.86	10.00	10.10
F1	1.90	2.12	2.40
F2	5.00	5.30	5.65
F3	8.70	9.00	9.30
F4	6.20	6.50	6.80
H	27.80	28.30	28.80
L	13.10	13.30	13.50
L1	2.85	3.00	3.15
L2	-	6.70REF	-
L3	3.10	3.60	4.10
ΦP	3.00	3.30	3.60
ΦP1	2.80	3.10	3.40

RECOMMENDED LAND PATTERN



UNIT: mm