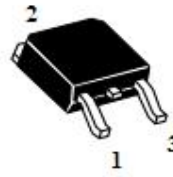


HBRA10200GCT & HBRA10200DCT

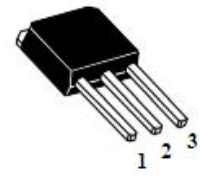
10.0AMPS. SCHOTTKY BARRIER RECTIFIERS

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.



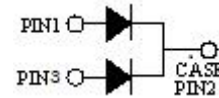
TO-252-2L
HBRA10200GCT



TO-251-3L
HBRA10200DCT

MECHANICAL DATA

- . Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
- . Mounting position: any



Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

MAXIMUM RATINGS (T_C=25°C unless otherwise noted)

Parameter	Symbol	HBRA10200GCT & HBRA10200DCT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current <i>Per Leg</i> at T _C =100°C <i>Total device</i>	$I_{F(AV)}$	5.0 10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) <i>Per Leg</i>	I_{FSM}	120.0	A
Typical Junction Capacitance (Note 1)	C_J	60	pF
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55 to +175	°C

ELECTRICAL CHARACTERISTICS - (Per Leg) (T_C=25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Typ	Max	Units	
Forward voltage drop	V_F	T _J =25°C	I _F =2A	0.76	----	V
			I _F =5A	0.83	0.90	
		T _J =125°C	I _F =2A	0.61	----	
			I _F =5A	0.69	0.80	
Reverse leakage current	I_R	T _J =25°C	V _R =200V	----	20	uA
		T _J =125°C	V _R =200V	----	5	mA

THERMAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

Parameter	Symbol	HBRA10200GCT	HBRA10200DCT	Units
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	6.5	6.5	°C/W

Notes:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Case

RATING AND CHARACTERISTIC CURVES

FIG1-TYPICAL FORWARD CURRENT DERATING CURVE

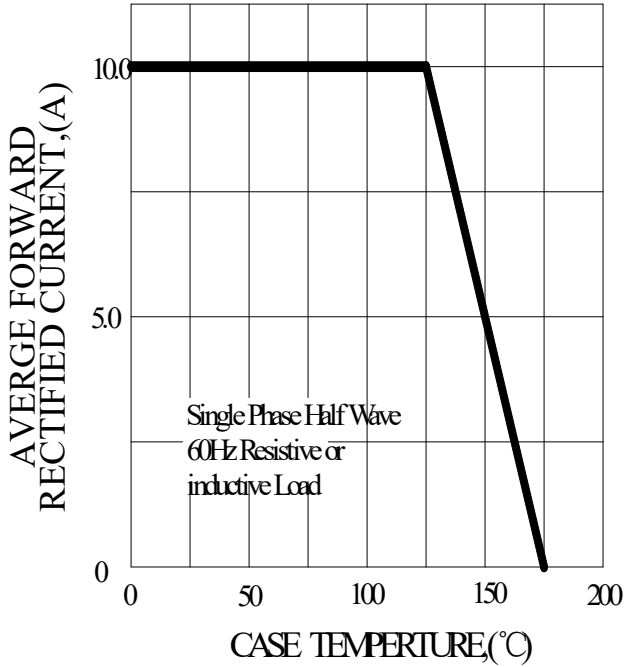


FIG2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

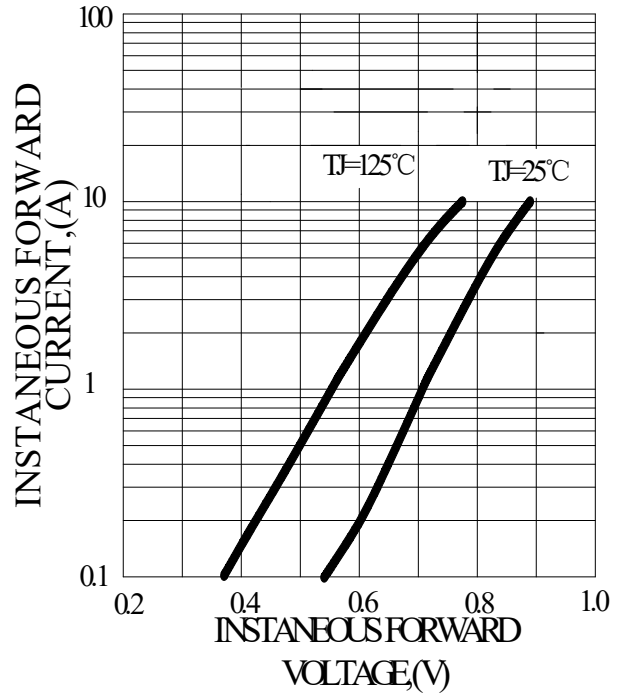


FIG3-MAXIMUM NON-REPEITIVE FORWARD SURGE CURRENT

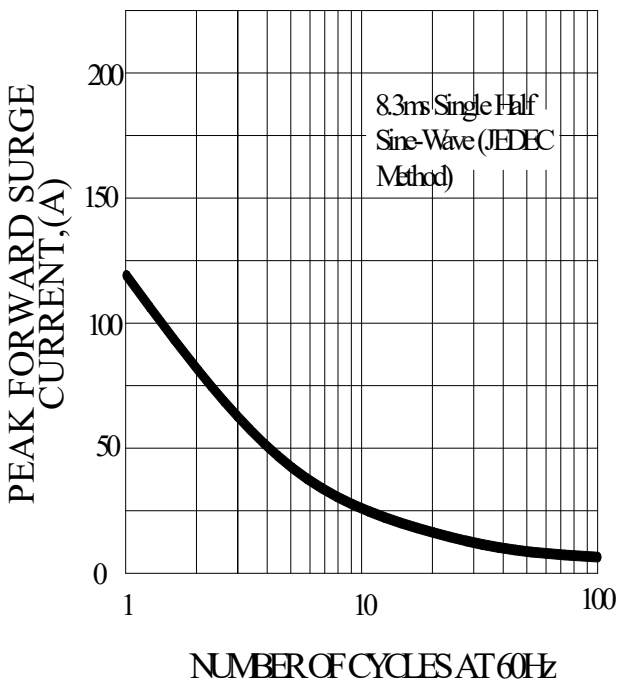
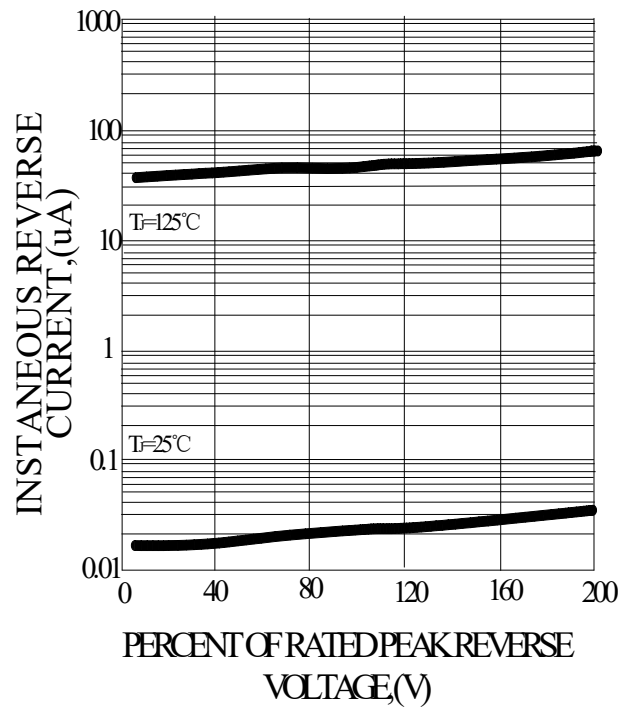
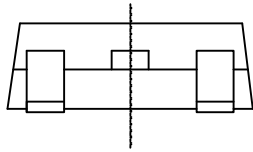
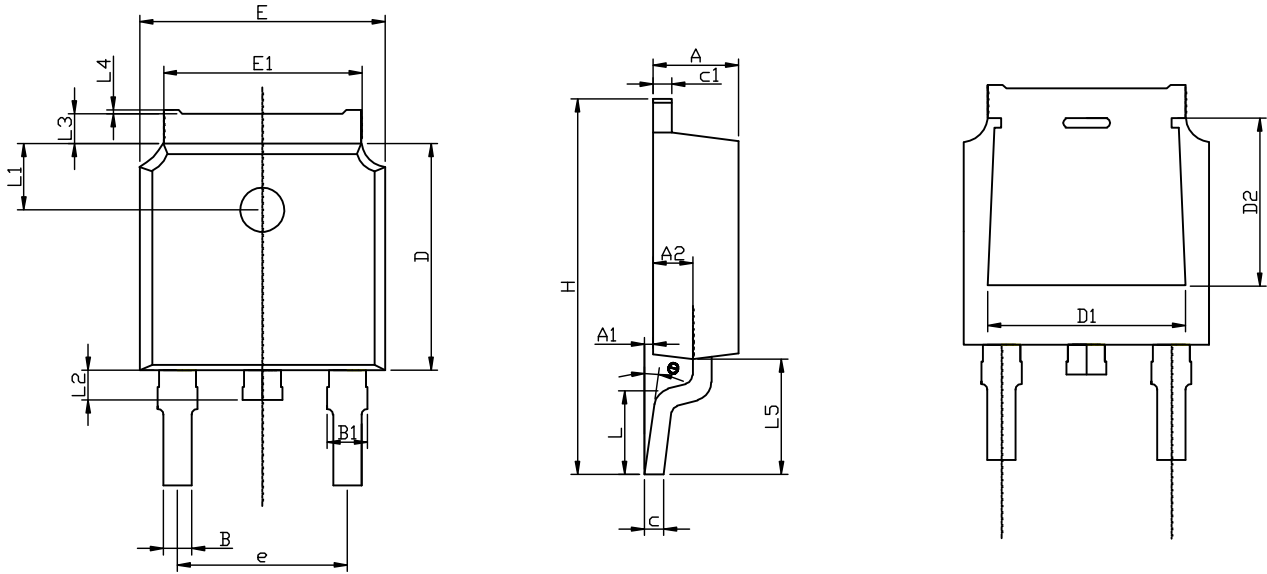


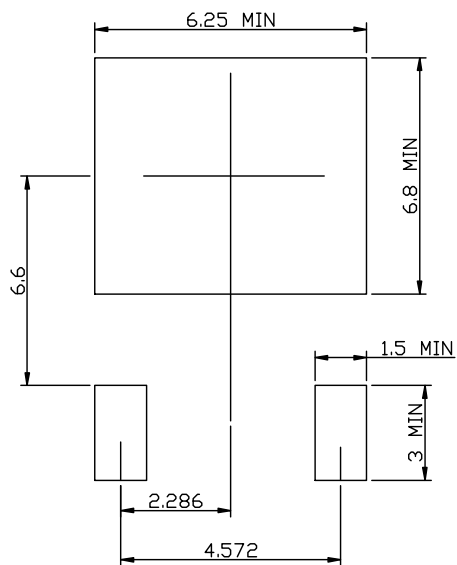
FIG4-TYPICAL REVERSE CHARACTERISTICS



TO-252-2L PACKAGE OUTLINE



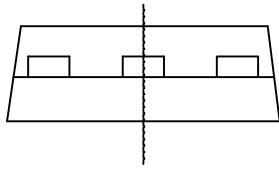
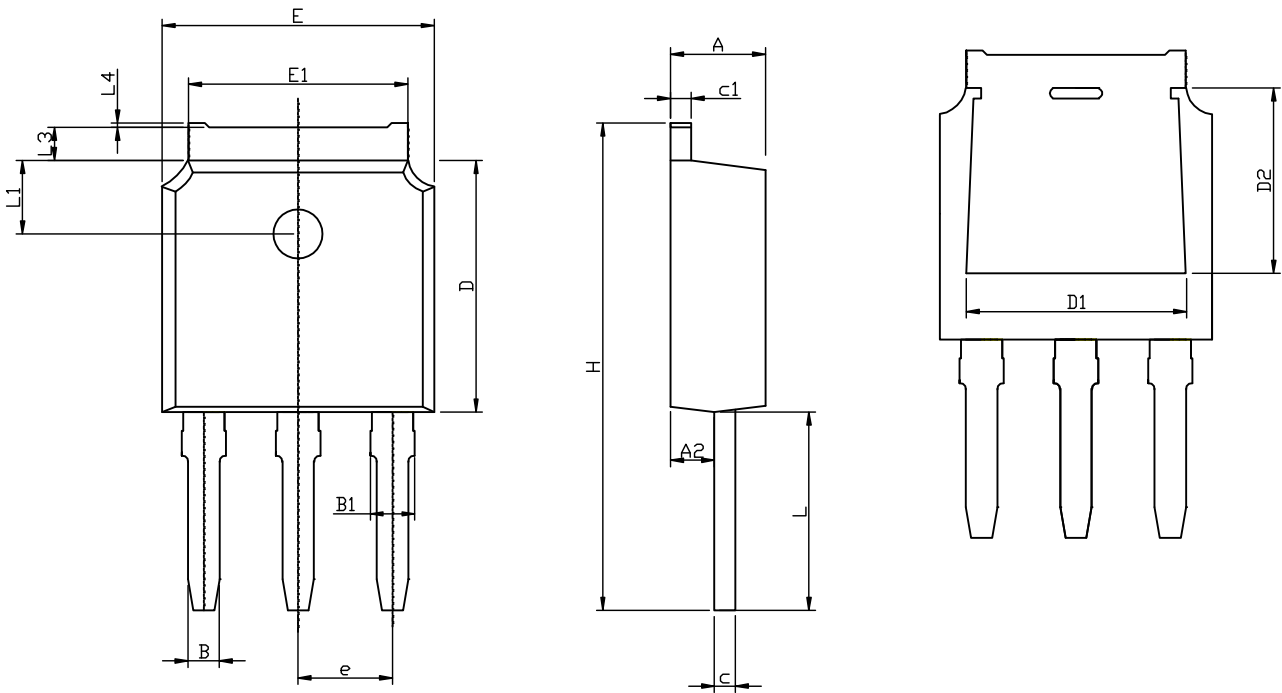
RECOMMENDED LAND PATTERN



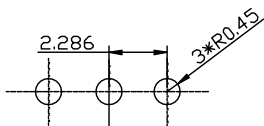
	MIN	NOM	MAX
A	2.15	2.30	2.45
A1	0.05	0.10	0.20
A2	0.91	1.07	1.22
B	0.66	0.76	0.86
B1	0.93	1.08	1.23
C	0.40	0.50	0.60
C1	0.40	0.50	0.60
D	5.95	6.10	6.25
D1	-	4.8REF	-
D2	-	3.8REF	-
E	6.45	6.60	6.75
E1	5.12	5.32	5.52
L		1.65	
L1	1.58	1.78	1.98
L2	0.60	0.80	1.00
L3	0.70	0.85	1.00
L4	0.00	0.05	0.20
L5	2.80	3.10	3.40
H	9.80	10.10	10.40
Θ	0°		8°
e		4.572REF	

UNIT: mm

TO-251-3L PACKAGE OUTLINE



RECOMMENDED LAND PATTERN

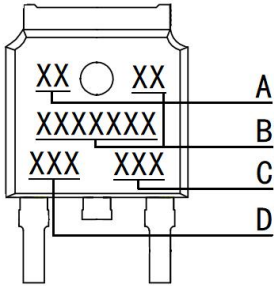


UNIT: mm

	MIN	NOM	MAX
A	2.15	2.30	2.45
A2	0.91	1.07	1.22
B	0.66	0.76	0.86
B1	0.93	1.08	1.23
C	0.40	0.50	0.60
C1	0.40	0.50	0.60
D	5.95	6.10	6.25
D1	-	4.8REF	-
D2	-	3.8REF	-
E	6.45	6.60	6.75
E1	5.12	5.32	5.52
L	4.50	4.80	5.10
L1	1.58	1.78	1.98
L3	0.70	0.85	1.00
L4	0.00	0.05	0.20
H	11.50	11.80	12.10
e		2.286REF	

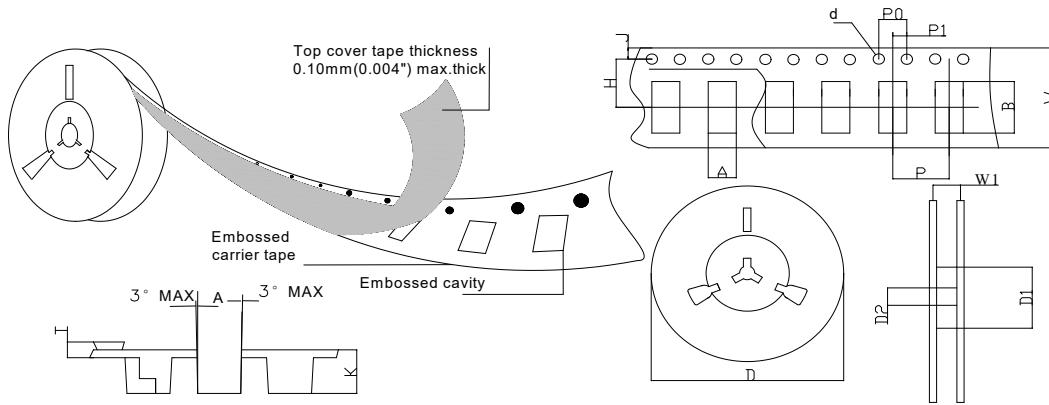
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date Code
D	Product Information

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	TO-252	ITEM	SYM BOL	TO-252
Carrier width	A	7.10(0.280)Typ	Carrier depth	K	2.79(0.110)Typ
Carrier length	B	10.7(0.421)Typ	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.50(0.059)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	100.0(3.937)Typ	Overall tape thickness	T	0.25(0.010)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	16.0(0.630)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	16.5(0.650)Typ
Punch hole position	H	7.50(0.295)Typ			