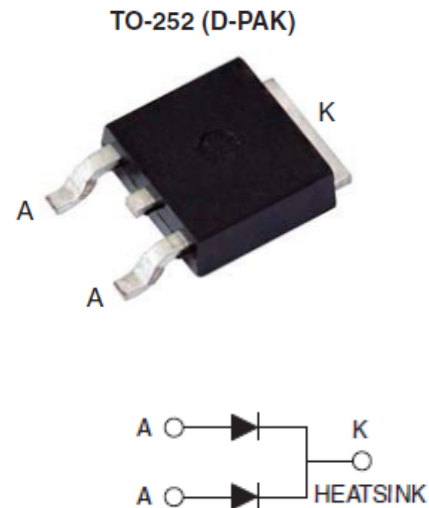


Product Specification

GOODARK Type
MBRD10200CT

Construction : Schottky Barrier Rectifier
Application : For General Purpose
(Manufacturer) :
Suzhou Goodark Electronics Co.,Ltd
Prepared on Sep. 17th, 2008
Prepared: R & D Department
Approval: QRA Department



SCHOTTKY BARRIER RECTIFIER
10 AMPERES
200 VOLTS

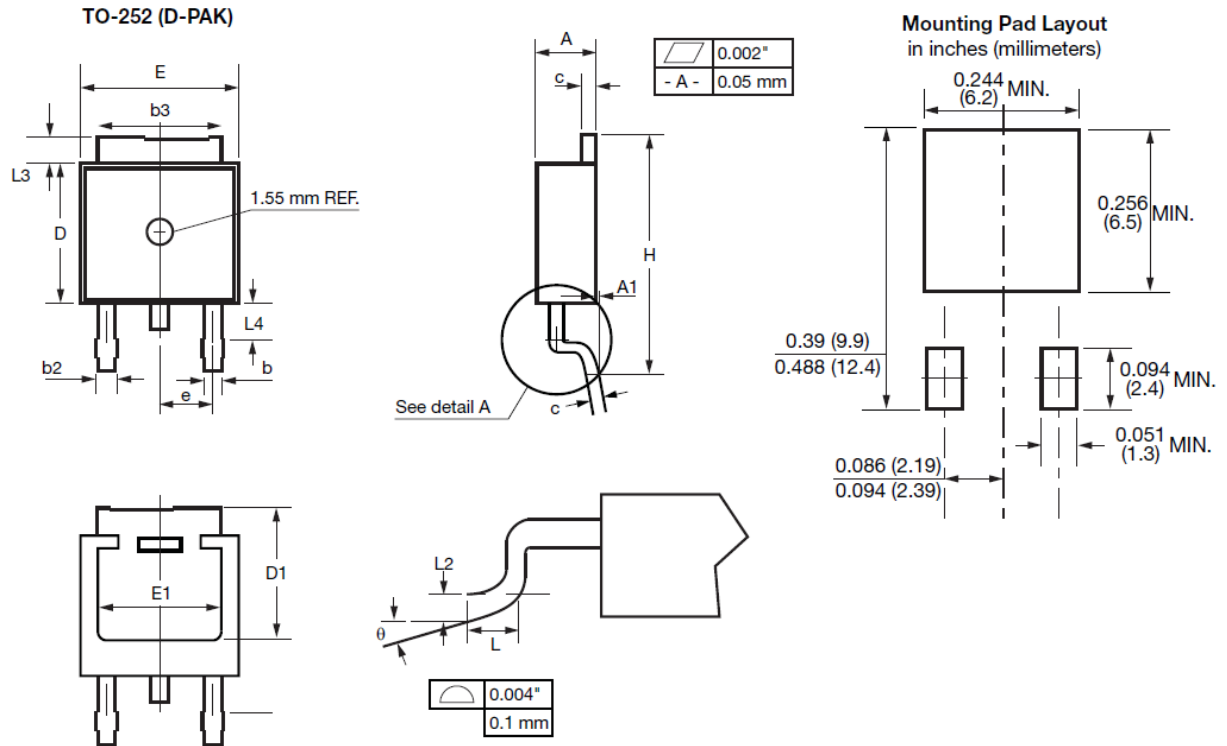
CONTENTS

1. Package Outline
2. Marking
3. Features& Mechanical Characteristics
4. Maximum Ratings and Electrical Characteristics
5. Rating and characteristic Curves
6. Packing Specification PACKAGING SPECIFICATION
7. Description of Box Label

1. Package Outline (TO220-AB)

UNIT:mm

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



SYMBOL	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.086	0.094	2.19	2.38
A1	-	0.005	-	0.13
b	0.025	0.035	0.64	0.89
b2	0.033	0.045	0.84	1.14
b3	0.205	0.215	5.21	5.46
c	0.018	0.024	0.46	0.61
D	0.235	0.250	5.97	6.22
D1	0.205	-	5.21	-
E	0.250	0.265	6.35	6.73
E1	0.190	-	4.83	-
e	0.090 BSC.		2.29 BSC.	
H	0.380	0.410	9.65	10.41
L	0.055	0.070	1.40	1.78
L2	0.020 BSC.		0.51 BSC.	
L3	0.035	0.050	0.89	1.27
L4	0.025	0.039	0.64	1.01
θ	0°	8°	0°	8°

Note

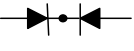
- Conforms to JEDEC TO-252 variation AA except dimension "D"

2.MARKING



1. Part Name : MBRD10200CT

2. Logo Mark: 

3. Polarity: 



3.Features& Mechanical Characteristics

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Guarding for over voltage protection
- For use in low voltage, high frequency inverters,
- Free wheeling, and polarity protection applications

Mechanical Characteristics

- Case: Epoxy, Molded
- Weight: 0.4grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max.for10 sec
- Shipped tape reel packing 2500/reel

4.Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise noted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MBRD10200CT	UNIT
Maximum repetitive peak reverse voltage			VRRM	200	V
Working peak reverse voltage			VRWM	200	V
Maximum DC blocking voltage			VDC	200	V
Maximum average forward rectified current at Tc=105°C total device per diode			IF(AV)	10 5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	125	A
Peak repetitive reverse current per leg at tp=2.0us , 1KHz			IRRM	0.5	A
Voltage rate of change (rated VR)			DV/dt	10000	V/us
Operating junction temperature range			TJ	-55 to+150	°C
Storage temperature range			TSTG	-55 to+150	°C
Isolation voltage (TO220F-AB only) from terminal to heatsink t = 1 sec			VAC	1500	V
Maximum instantaneous forward voltage per leg	IF=5A IF=5A	TC=25°C TC=125°C	VF	0.92 0.82	V
Maximum reverse current per leg at working peak Reverse voltage	TJ=25°C TJ=100°C		IR	200 15	uA mA

Thermal Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Type Value	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	3.5	°C /W
RθJA	Thermal Resistance, Junction to Ambient per Leg	60	°C /W

Note:

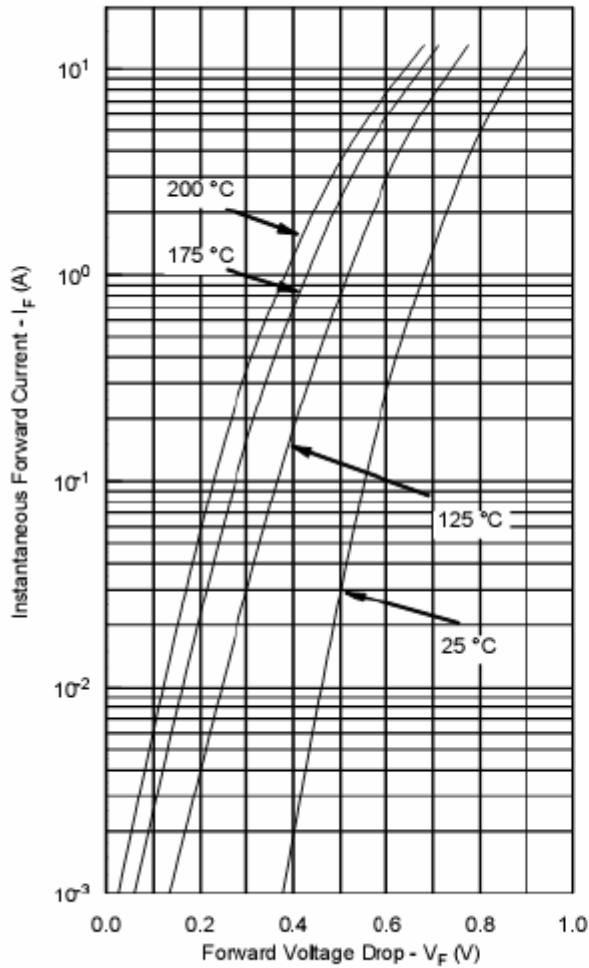
1. Screw mounting with 4-40 screw, where washer diameter is ≤4.9mm(0.19 "))
2. Pulse test:300us pulse width,1% duty cycle



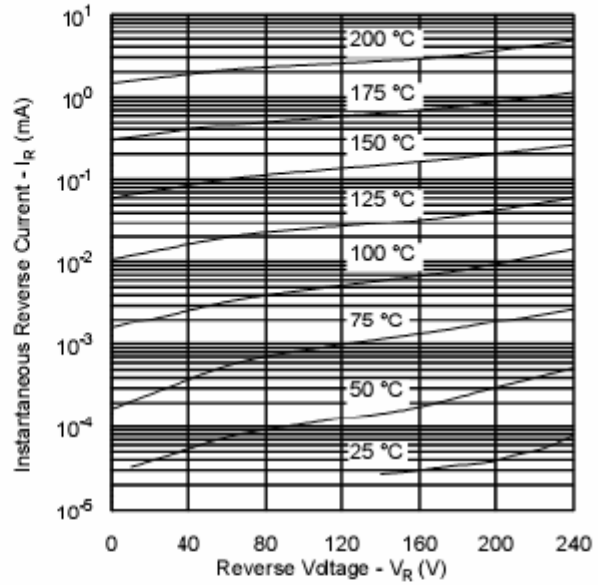
3. Rating and Characteristic Curves

(Tc=25°C Unless otherwise noted)

Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance

