

Product Specification

GOODARK Type
MURB1040CT

Construction : Ultra Fast Recover diode
Application : For power switch

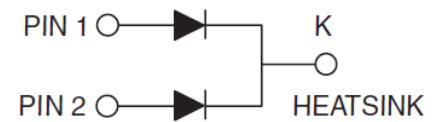
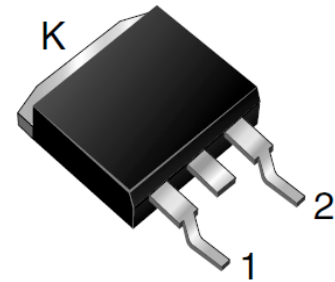
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on May. 10th, 2011

Prepared: R & D Department

Approva: QRA Department



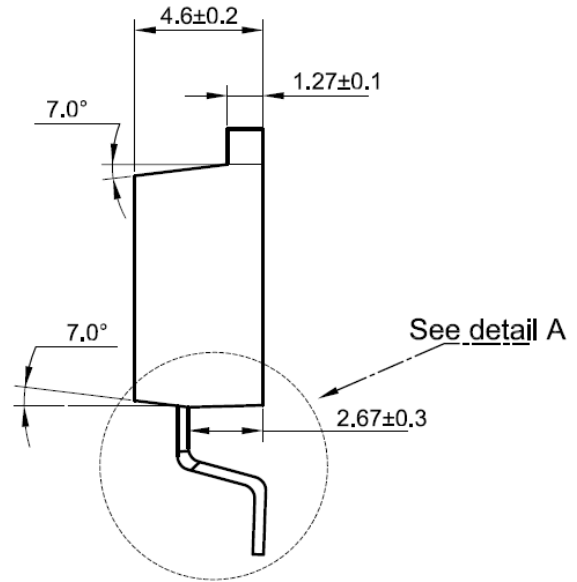
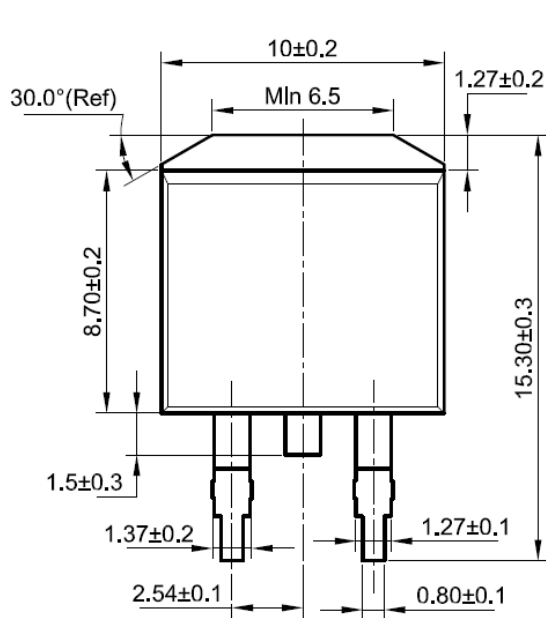
ULTRA FAST RECOVER DIODE
10 AMPERES
400 VOLTS

CONTENTS

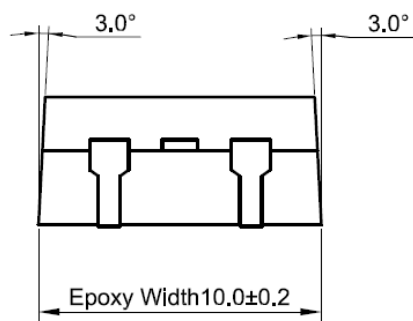
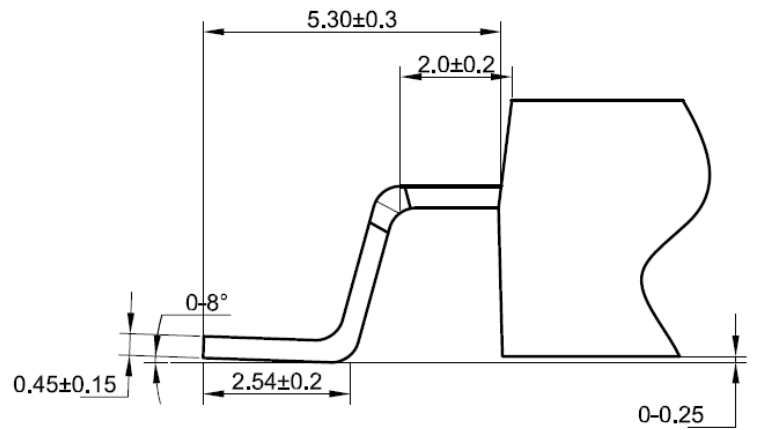
1. Package Outline
2. Marking
3. Features& Mechanical Characteristics
4. Maximum Ratings and Electrical Characteristics
5. Rating and characteristic Curves
6. Packing Specification PACKAGING SPECIFICATION
7. Description of Box Label

1. Package Outline (TO263)

UNIT:mm

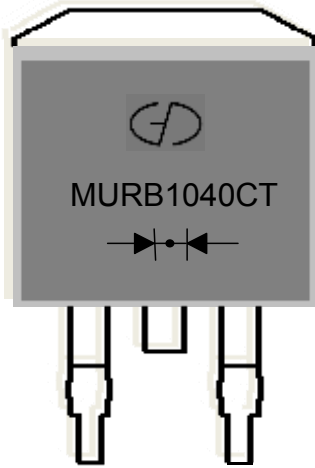


Detail A



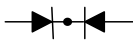
Lead Frame Material : Copper Plating: Pure Tin Plating

2.MARKING



1. Part Name : MURB1040CT

2. Logo Mark: 

3. Polarity: 



3.Features& Mechanical Characteristics

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- For surface mounted application
- 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: 1.4grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max.for10 sec
- Shipped 50 units per plastic tube or tape reel packing 800/reel

4.Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MURB1040CT	UNIT
Maximum repetitive peak reverse voltage			VRRM	400	V
Working peak reverse voltage			VRWM	400	V
Maximum DC blocking voltage			VDC	400	V
Maximum average forward rectified current at Tc=105°C total device per diode	Per Leg Per device		IF(AV)	5 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	90	A
Operating junction temperature range			TJ	—55 to+150	°C
Storage temperature range			TSTG	—55 to+150	°C
Maximum instantaneous forward voltage per leg	IF=5A	TC=25°C	VF	1.30	V
	IF=5A	TC=125°C		1.20	
Maximum reverse current per leg at working peak Reverse voltage			TJ=25°C TJ=100°C	10 500	uA uA
Maximum Reverse Recover Time (If=0.5Amp, IR=1.0Amp,Irec=0.25Amp)	Trr		Trr	50	ns

Thermal Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Max	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	2.0	°C /W

Note:

1. Pulse test:300us pulse width, duty cycle=2%



5. Rating and Characteristic Curves

($T_c=25^\circ\text{C}$ Unless otherwise noted)

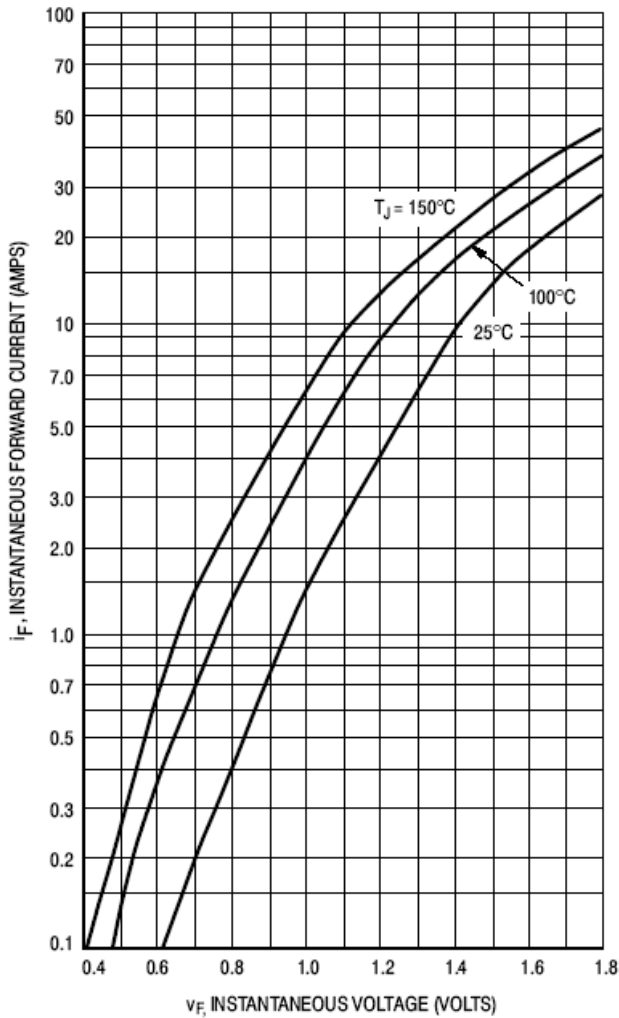


Figure 11. Typical Forward Voltage, Per Leg

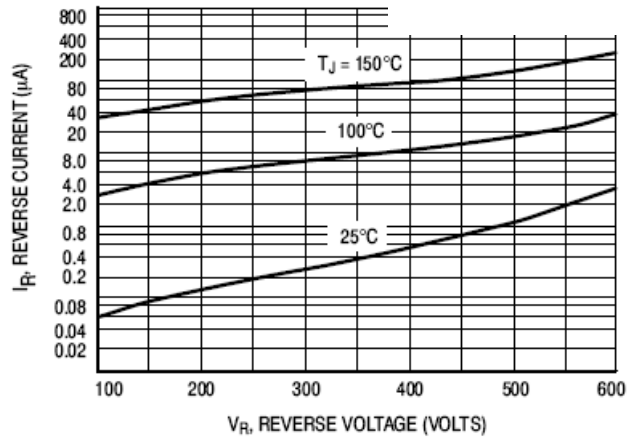


Figure 12. Typical Reverse Current, Per Leg*

* The curves shown are typical for the highest voltage device in the voltage grouping. Typical reverse current for lower voltage selections can be estimated from these same curves if V_R is sufficiently below rated V_R .

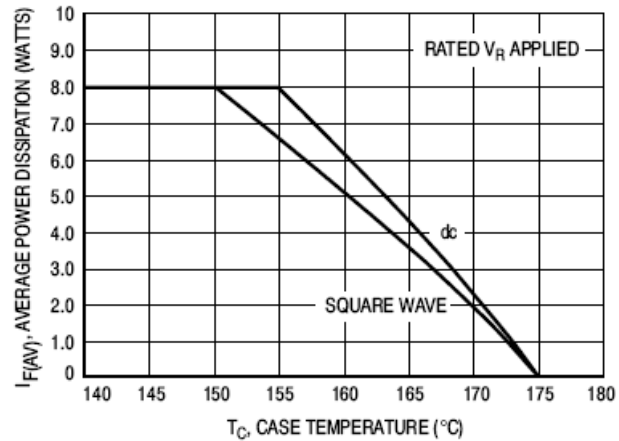


Figure 13. Current Derating, Case, Per Leg

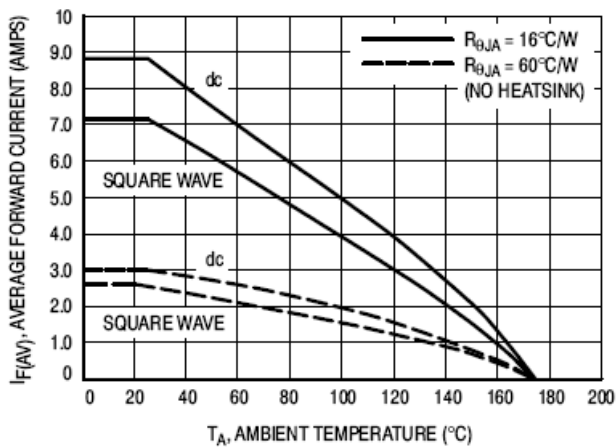


Figure 14. Current Derating, Ambient, Per Leg

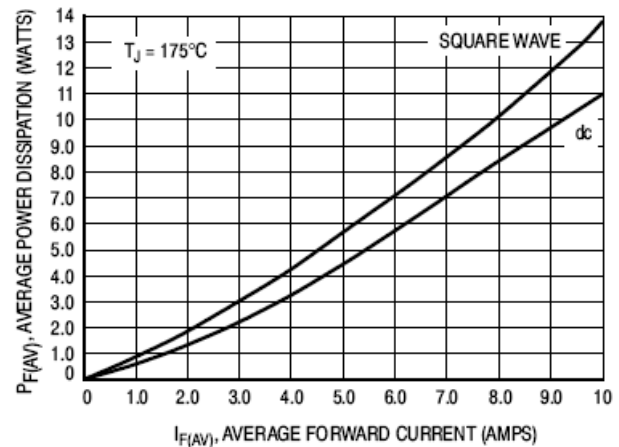
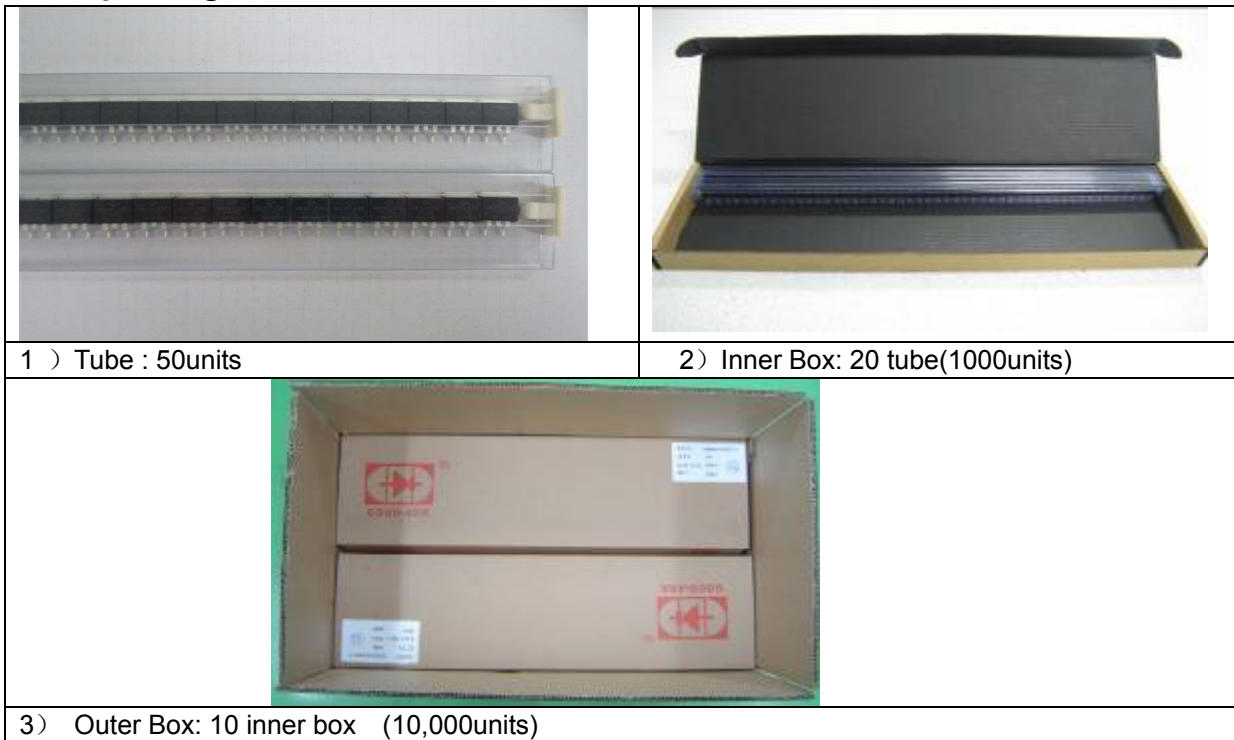


Figure 15. Power Dissipation, Per Leg

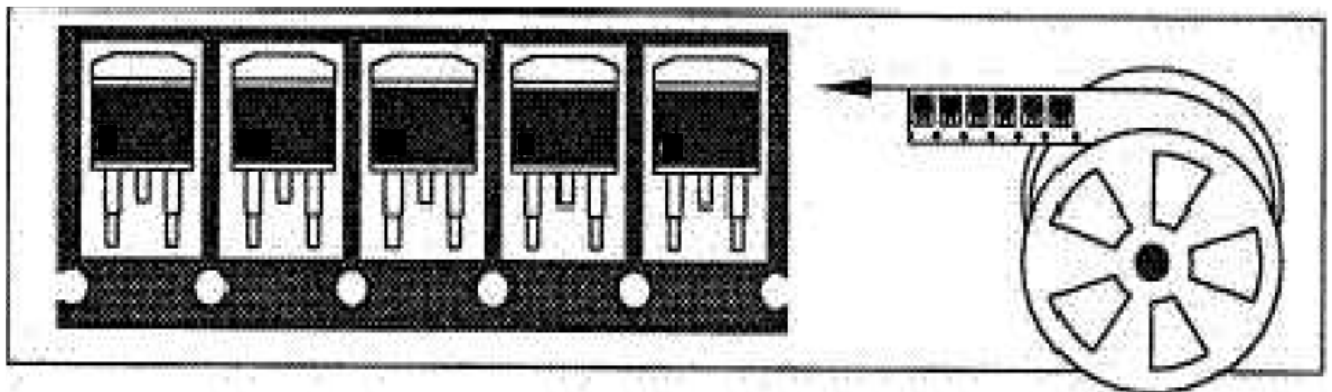
6. Packing Specification

6.1 Tube packing



6.2 Tape&reel packing

Packing size:800 /reel(13' reel)



7. DESCRIPTION of BOX LABEL

	<p>TYPE: Q'TY: P/O NO: LOT NO:</p>
<p>1) Inner Box Label</p>	<p>2) Inner Box Label</p>
	<p>TYPE: Q'TY: P/O NO:</p>
<p>3) Outer Box Label</p>	<p>4) Outer Box Label</p>