

Product Specification

GOODARK Type
MURB2020CT

Construction : Ultra Fast Recover diode
Application : For power switch

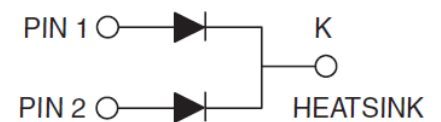
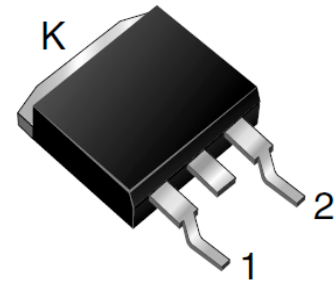
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on May. 10th, 2011

Prepared: R & D Department

Approva: QRA Department



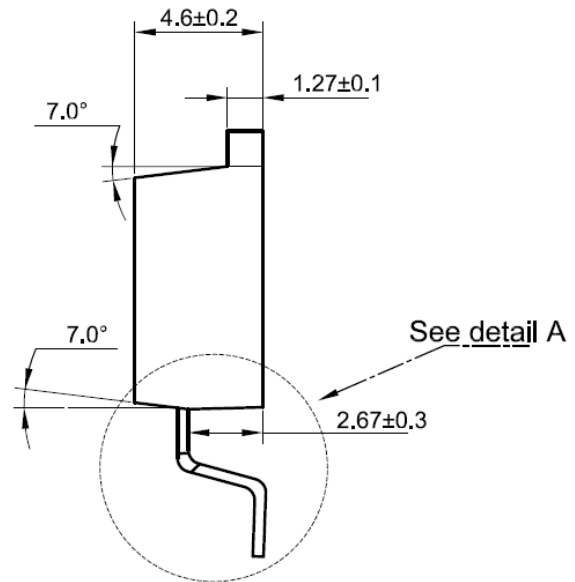
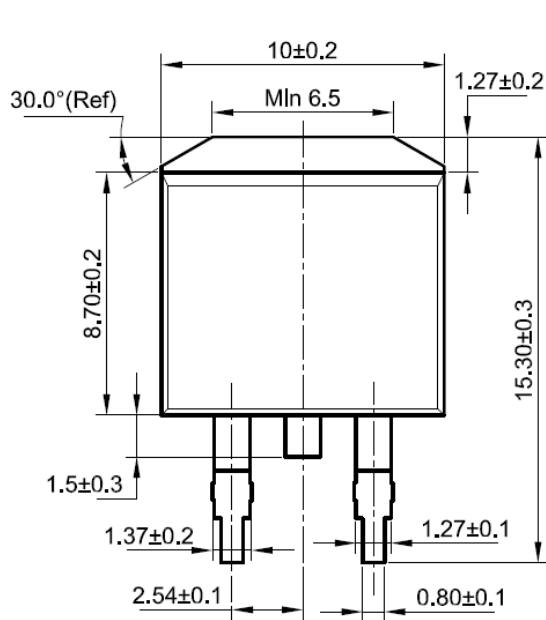
ULTRA FAST RECOVER DIODE
20 AMPERES
200 VOLTS

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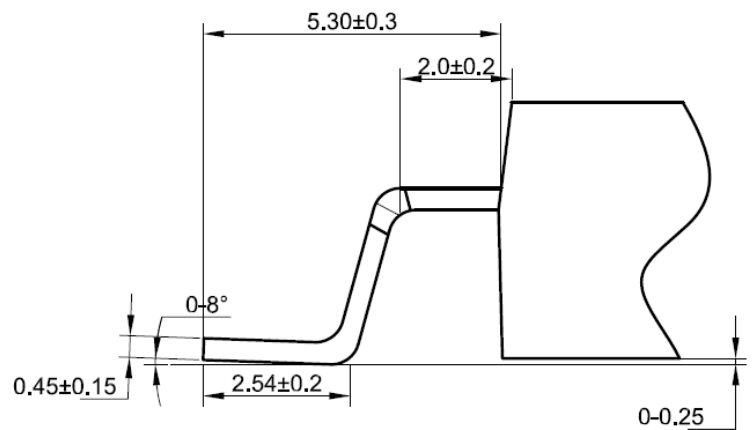
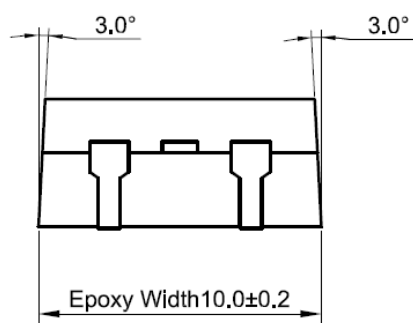
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1. Package Outline (TO263)

UNIT:mm

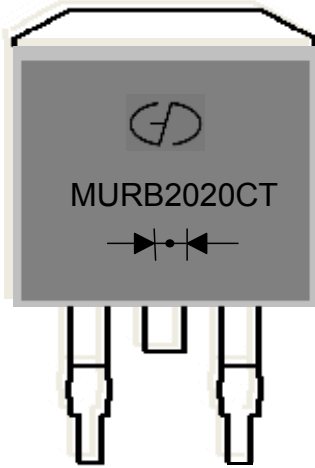


Detail A



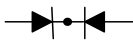
Lead Frame Material : Copper Plating: Pure Tin Plating

2.MARKING



1. Part Name : MURB2020CT

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	MURB2020CT	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	Per Leg Per device		IF(AV)	10 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	100	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=10A IF=10A	TC=25°C TC=125°C	VF	1.0 0.9	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25°C TJ=100°C	IR	20 250	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)

FIG.1- CURRENT DERATING, CASE, PER LEG

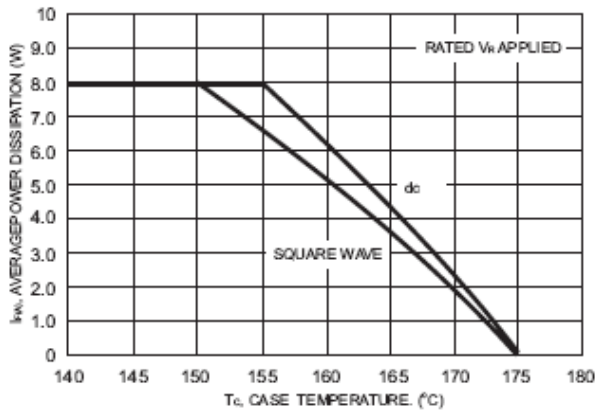
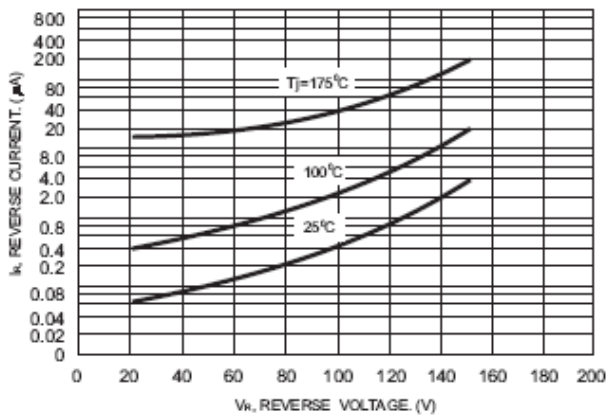


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



*The curves shown are typical for 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 .

FIG.4- TYPICAL CAPACITANCE, PER LEG

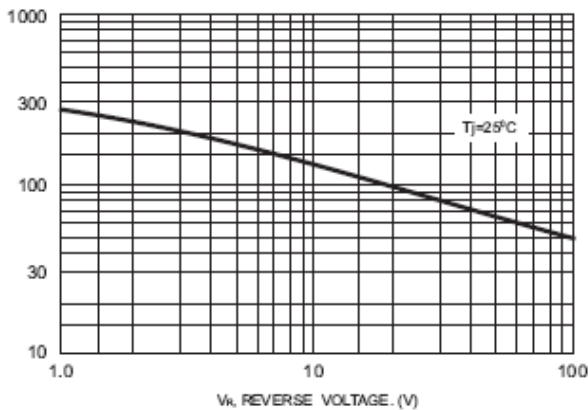


FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

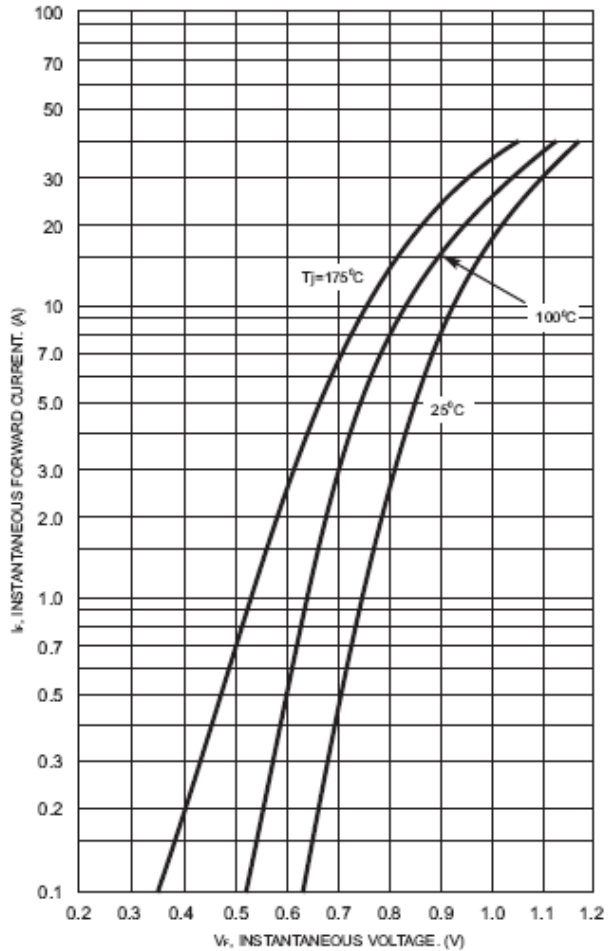
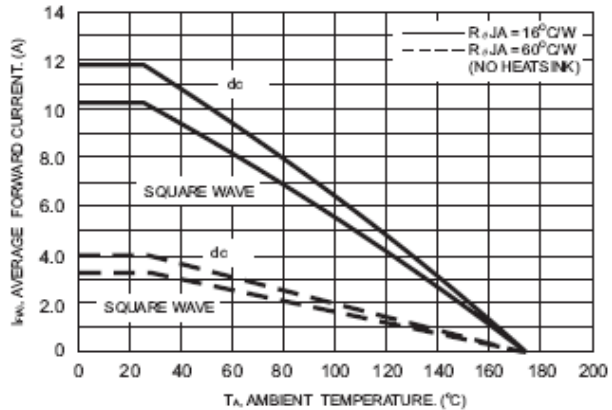
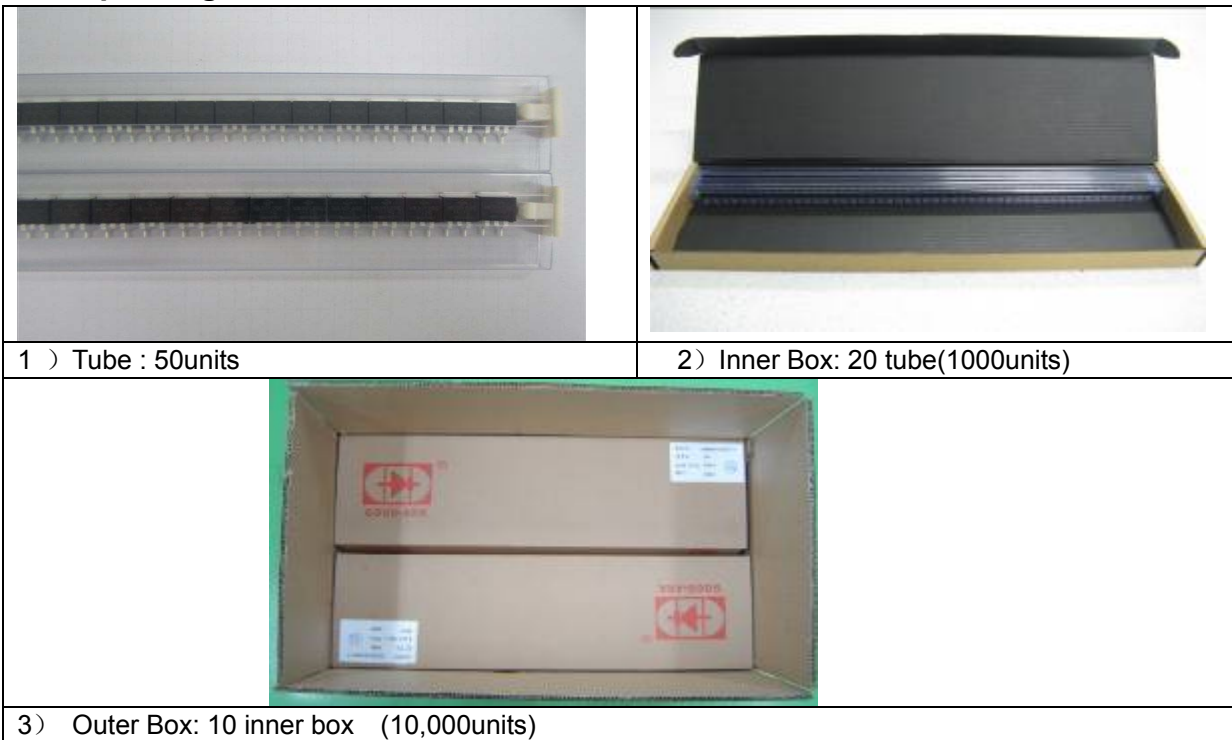


FIG.5- CURRENT DERATING, AMBIENT, PER LEG



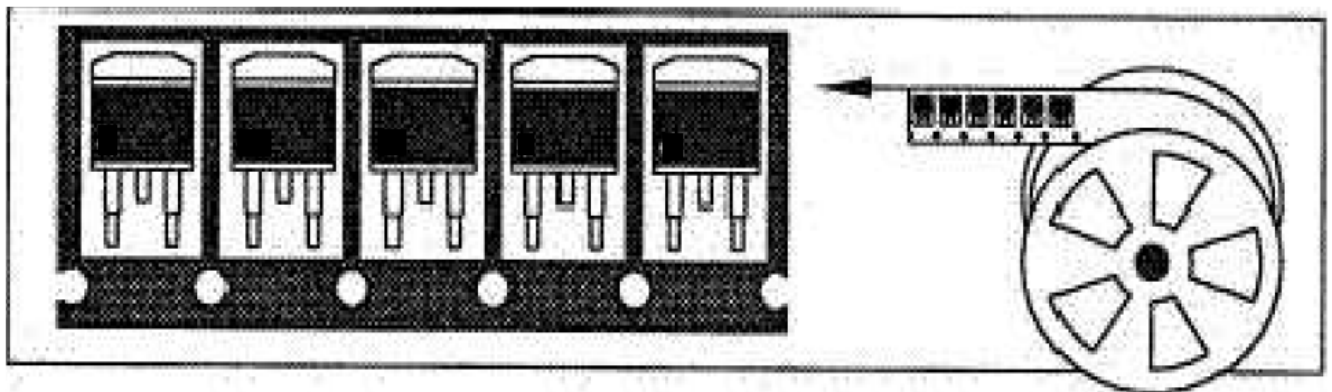
6. Packing Specification

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>