

Product Specification

GOODARK Type (Bypass Diode Module)

GFT3050SM

Construction : Schottky Barrier Rectifier

Application : For General Purpose

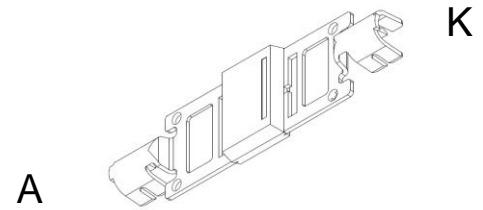
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on May. 10th, 2019

Prepared: R & D Department

Approval: QRA Department



SCHOTTKY BARRIER RECTIFIER

30 AMPERES

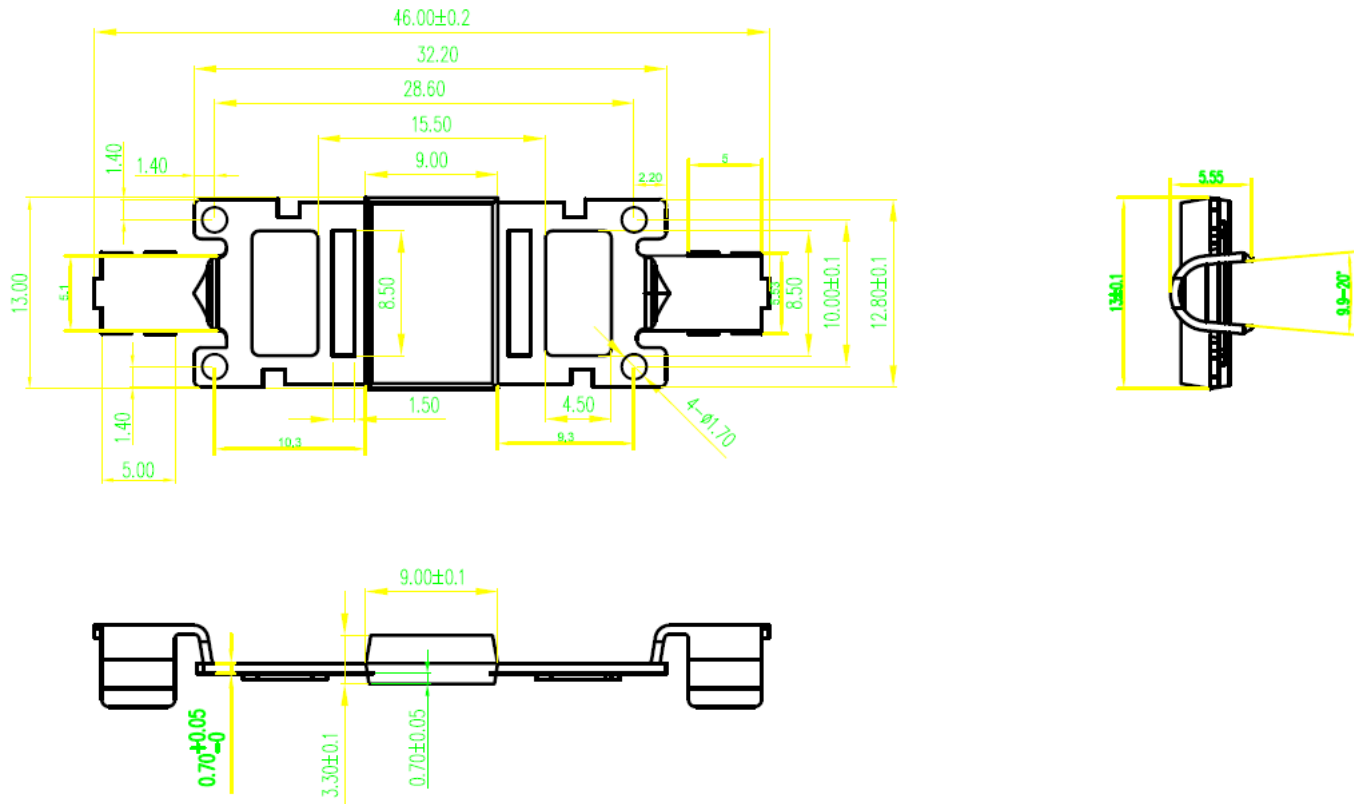
50 VOLTS

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1. Package Outline (FT-Module)

UNIT:mm



Lead Frame Material : Copper Plating: Nickel Plating



2.Features& Mechanical Characteristics

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- 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: 12.4grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max.for10 sec
- Shipped 200 units per inner box/1.2k per outer box.

4.Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise noted)					
PARAMETER	TEST CONDITIONS		SYMBOL	GFT3050SM	UNIT
Maximum repetitive peak reverse voltage			VRRM	50	V
Working peak reverse voltage			VRWM	50	V
Maximum DC blocking voltage			VDC	50	V
Maximum average forward rectified current at Tc=105°C total device per diode			IF(AV)	30	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	300	A
Peak repetitive reverse current per leg at tp=2.0us , 1KHz			IRRM	3.0	A
Voltage rate of change (rated VR)			DV/dt	10000	V/us
Operating junction temperature range (in DC forward mode operation without reverse bias)(t<=1h)			TJ	-55 to+200	°C
Storage temperature range			TSTG	-55 to+150	°C
Maximum instantaneous forward voltage per leg	IF=15A IF=15A IF=30A IF=30A	TC=25°C TC=125°C TC=25°C TC=125°C	VF	0.52 0.46 0.57 0.52	V
Maximum reverse current per leg at working peak Reverse voltage	TJ=25°C TJ=100°C		IR	200 20	uA mA

Thermal Characteristics Ta=25°C unless otherwise noted

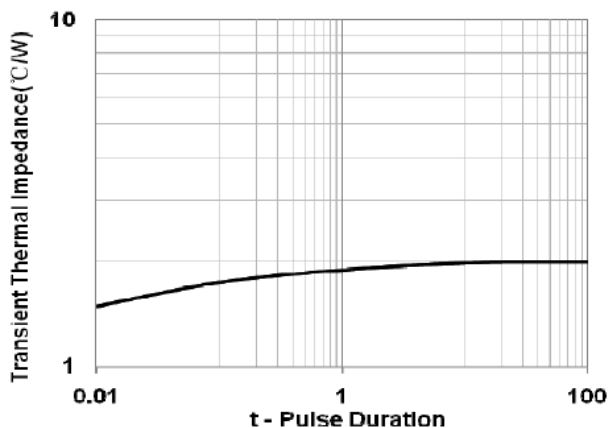
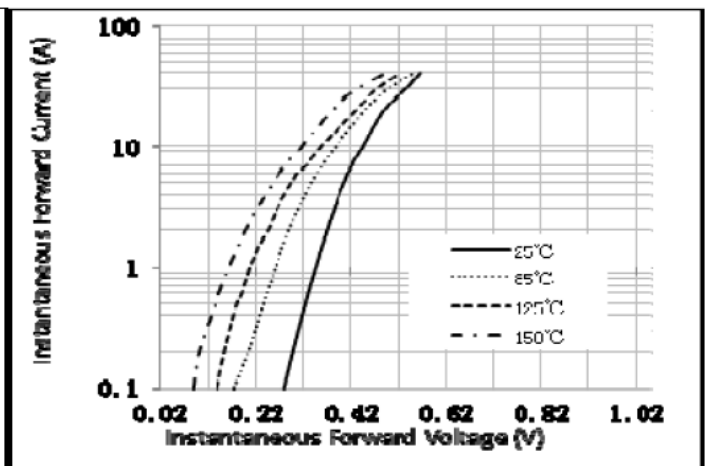
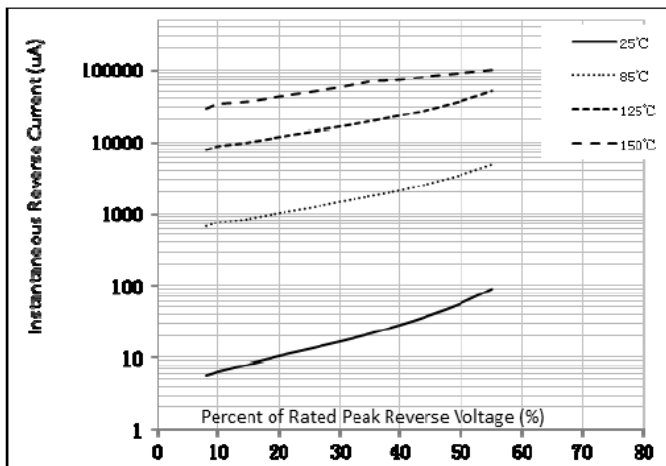
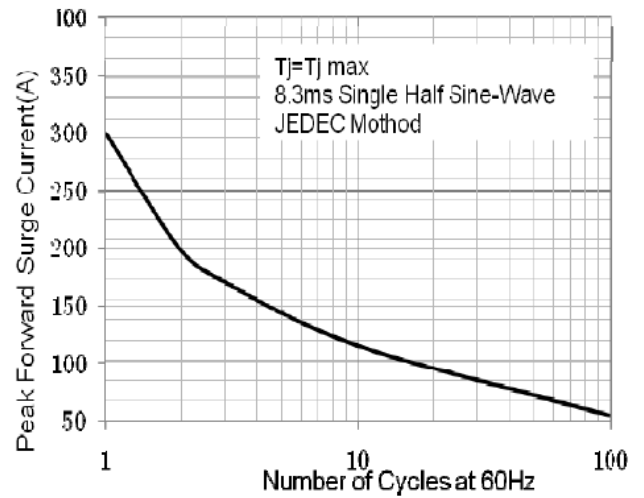
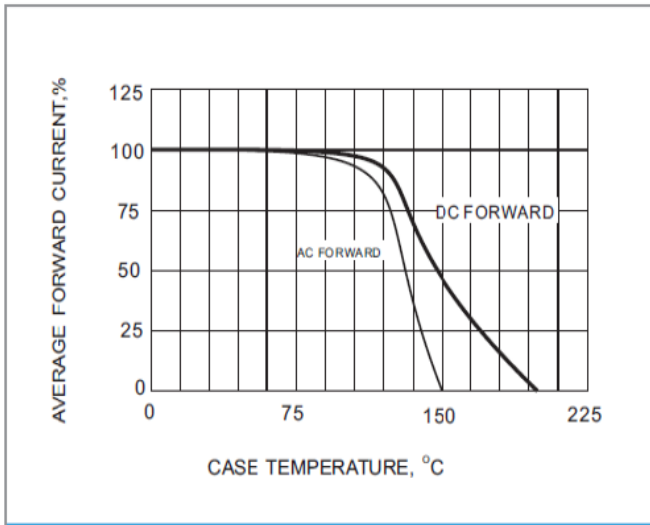
Symbol	Parameter	TYP	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	0.7	°C /W

Note:

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

5. Rating and Characteristic Curves

(Tc=25°C Unless otherwise noted)


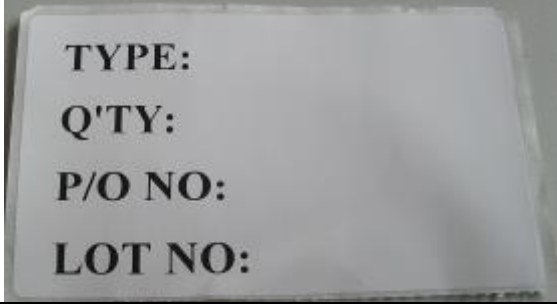

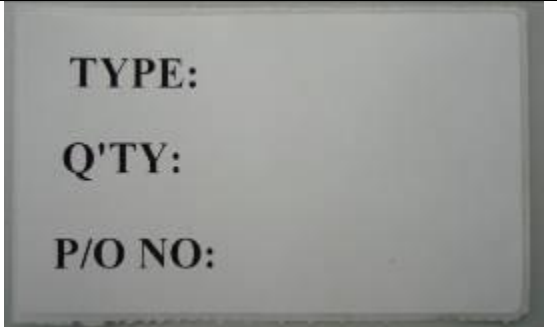


6. Packing Specification

6.1 Box packing

1) Tube : 50units	2) Inner Box: 20 tube(1000units)
	
3) Outer Box: 10 inner box (10,000units)	

7. DESCRIPTION of BOX LABEL

	
1) Inner Box Label	2) Inner Box Label
	
3) Outer Box Label	4) Outer Box Label