

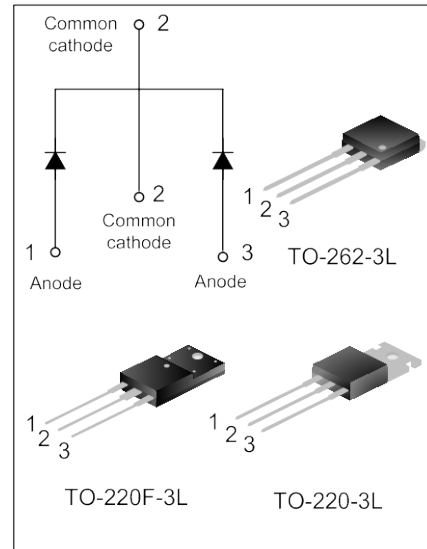
20A, 100V SCHOTTKY RECTIFIER

GENERAL DESCRIPTION

SBD20C100T/F/K is schottky rectifier fabricated in silicon epitaxial planar technology. Typical applications are in switching power supplies and protection circuit etc.

FEATURES

- * Guard ring for Stress Protection
- * High Surge Capacity
- * Low power loss , high efficiency
- * Low forward voltage drop



ORDERING INFORMATION

Part No.	Package	Marking	Material	Packing
SBD20C100T	TO-220-3L	SBD20C100T	Pb free	Tube
SBD20C100F	TO-220F-3L	SBD20C100F	Pb free	Tube
SBD20C100K	TO-262-3L	SBD20C100K	Pb free	Tube

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

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Average Forward Rectified Current	I _{FAV}	20	A
Peak Forward Surge Current@8.3ms	I _{FSM}	150	A
Operation Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-40~150	°C

THERMAL CHARACTERISTICS

Characteristics	Symbol	Value	Unit
Thermal Resistance, Junction-to-Case	R _{θJC}	2.0	°C/W

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Test conditions	Min.	Max.	Unit
Forward Voltage	V _F	I _F =10A (T _C =25°C)	--	0.85	V
		I _F =10A(T _C =125°C)	--	0.75	V
Reverse Current	I _R	V _R =100V(T _C =25°C)	--	50	μA
		V _R =100V(T _C =125°C)	--	25	mA

TYPICAL CHARACTERISTICS

Figure 1. Typical forward voltage

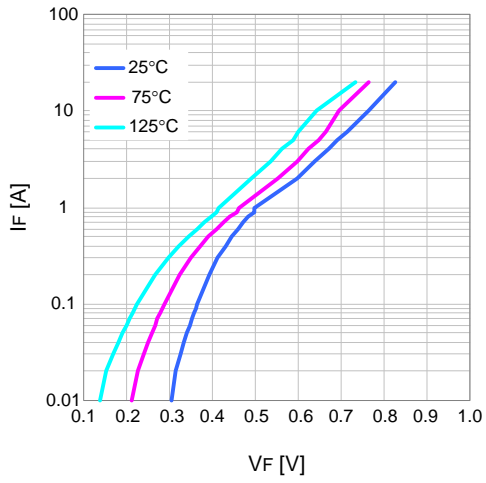


Figure 2. Typical reverse current

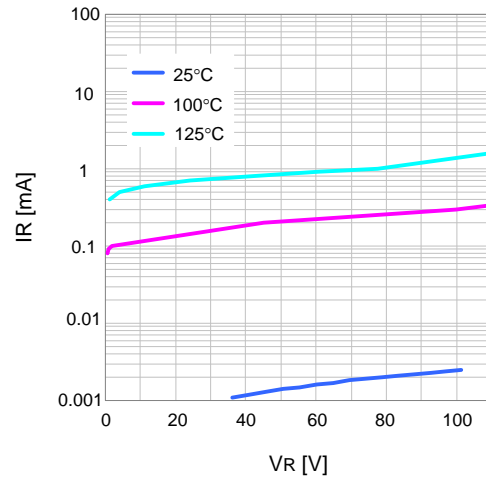


Figure 3. Typical capacitance

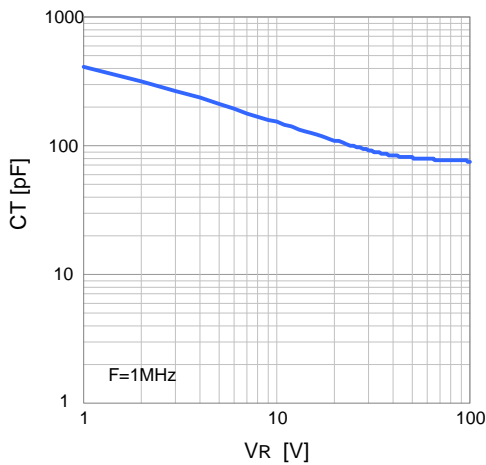
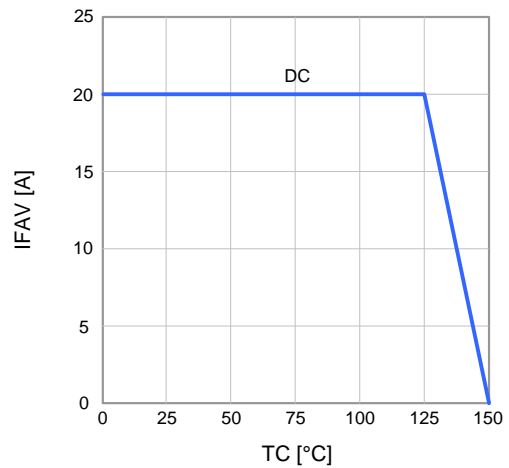


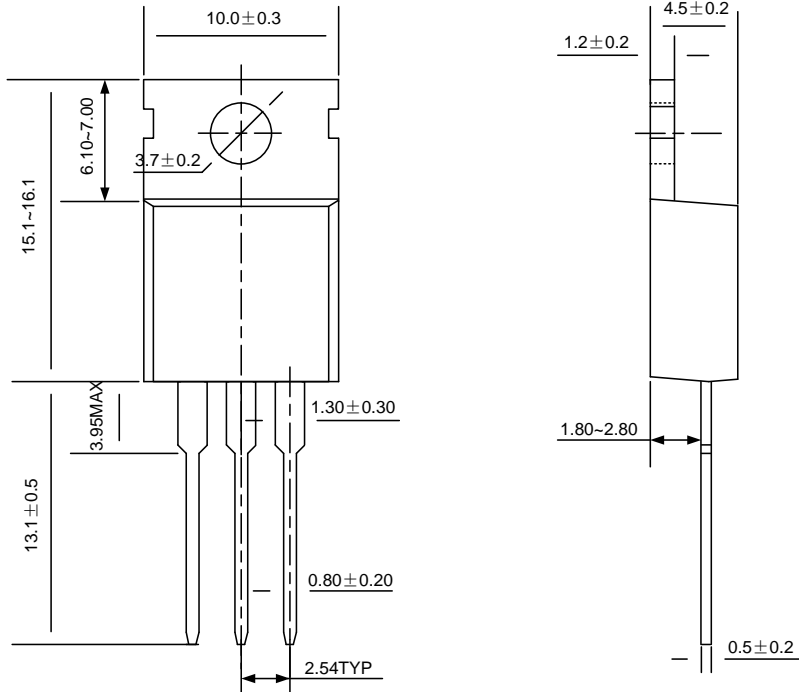
Figure 4. Average forward rectified current



PACKAGE OUTLINE

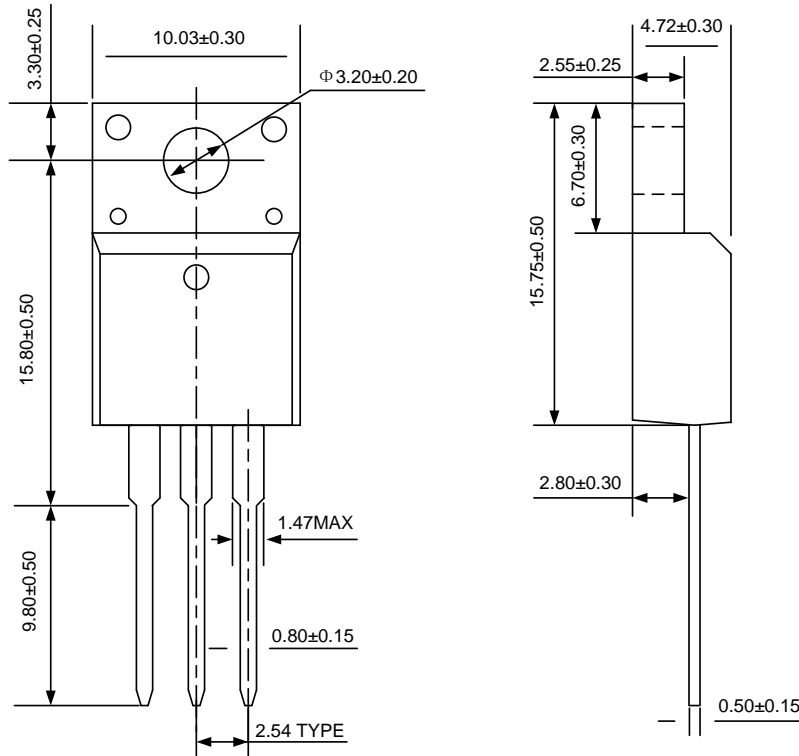
TO-220-3L

UNIT: mm

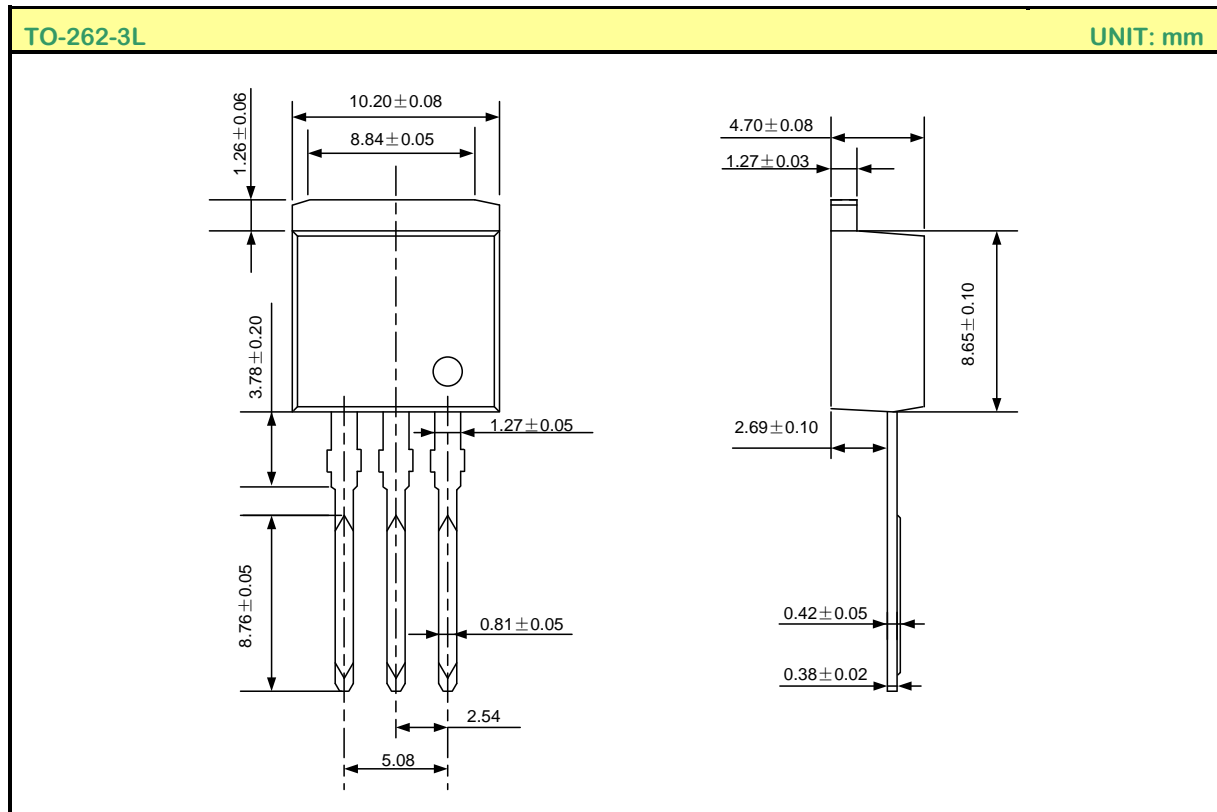


TO-220F-3L

UNIT: mm



PACKAGE OUTLINE (continued)



Disclaimer:

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- Silan will supply the best possible product for customers!



ATTACHMENT

Revision History

Date	REV	Description	Page
2010.06.09	1.0	Original	
2010.08.25	1.1	Add TO-220-3L, TO-220F-3L package of youyi; Add TO-220-3L package of kangbi	
2010.10.09	1.2	Add TO-220F-3L package of kangbi	
2010.10.22	1.3	Modify the template of datasheet	
2011.09.01	1.4	Modify "PACKAGE OUTLINE"	
2012.05.22	1.5	Add the curve of "Average Forward Rectified Current "	
2012.09.28	1.6	Modify figure 4	
2012.10.26	1.7	Add the package of TO-262-3L	