

20A, 60V SCHOTTKY RECTIFIER

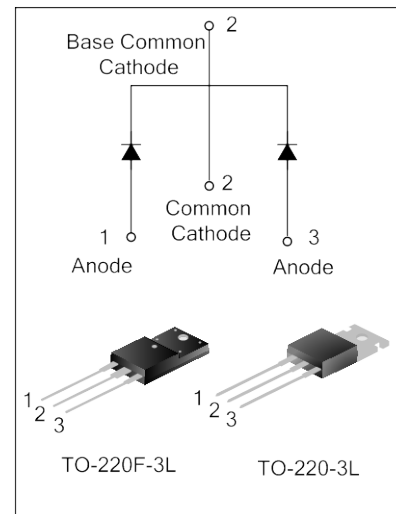
DESCRIPTION

SBD20C60T/F is schottky rectifier fabricated in silicon epitaxial planar technology, Guard ring construction for over voltage protection and enhanced long term reliability.

Typical applications are in switching power supplies, converter, free-wheeling diodes, and reverse battery protection.

FEATURES

- * Guard ring for Stress Protection
- * High Surge Capacity
- * Low power loss , high efficiency
- * Low Forward Voltage Drop
- * 150°C Operating Junction Temperature



ORDERING INFORMATION

Part No.	Package	Marking	Material	Packing
SBD20C60T	TO-220-3L	SBD20C60T	Pb free	Tube
SBD20C60F	TO-220F-3L	SBD20C60F	Pb free	Tube

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

Characteristics	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Average Forward Rectified Current	I _{FAV}	20	A
Peak Forward Surge Current@8.3ms	I _{FSM}	150	A
Operation Junction Temperature Range	T _J	-40~150	°C
Storage Temperature Range	T _{STG}	-40~150	°C

THERMAL CHARACTERISTICS

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

ELECTRICAL CHARACTERISTICS (Per Leg)

Characteristics	Symbol	Test Condition	Min.	Max.	Unit
Forward Voltage	V _F	I _F =10 A; T _J =25°C	--	0.71	V
	V _F	I _F =10 A; T _J =125°C	--	0.61	V
Reverse Current	I _R	V _R =60V; T _J =25°C	--	100	μA
	I _R	V _R =60V; T _J =125°C	--	15	mA

CHARACTERISTIC CURVES

Figure 1. Typical forward voltage

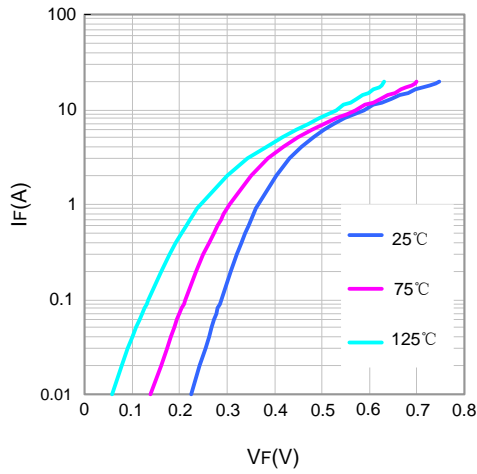


Figure 2. Typical reverse current

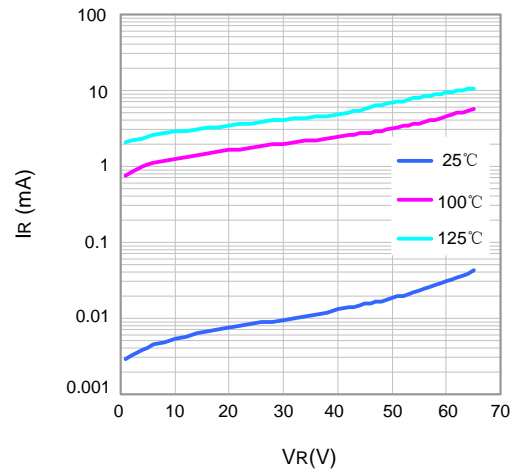


Figure 3. Typical capacitance

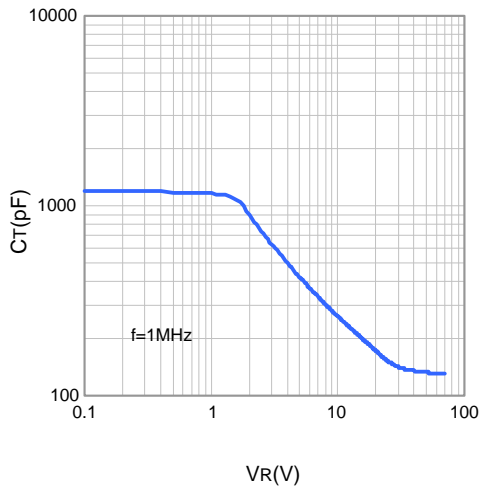
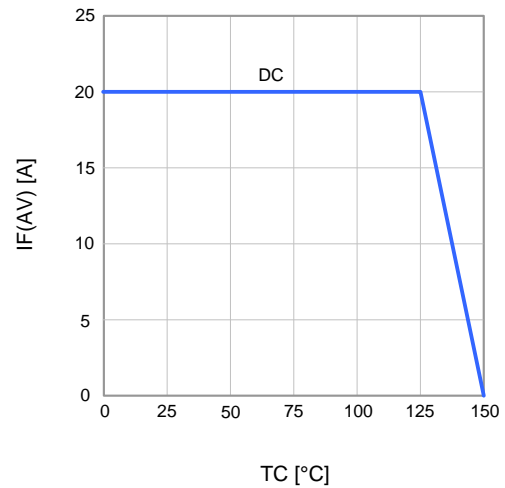


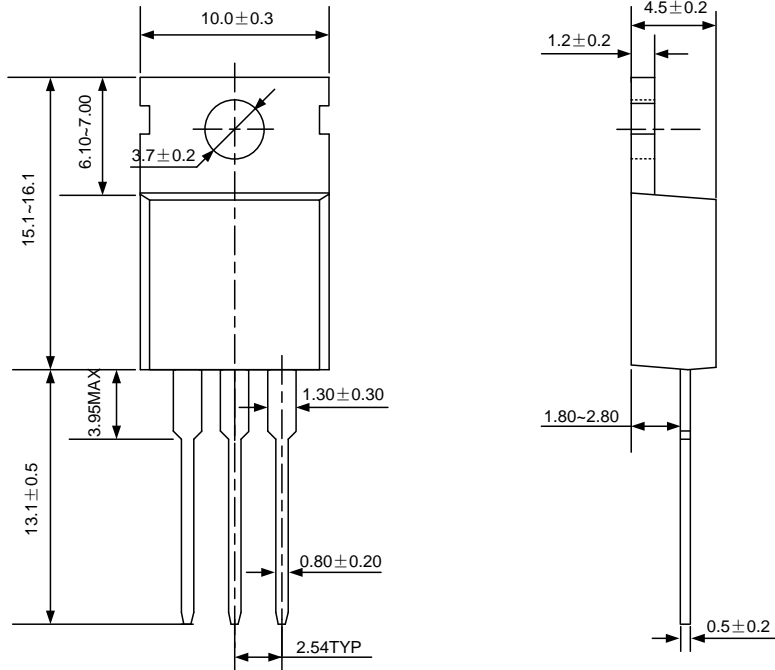
Figure 4. Average forward rectified current



PACKAGE OUTLINE

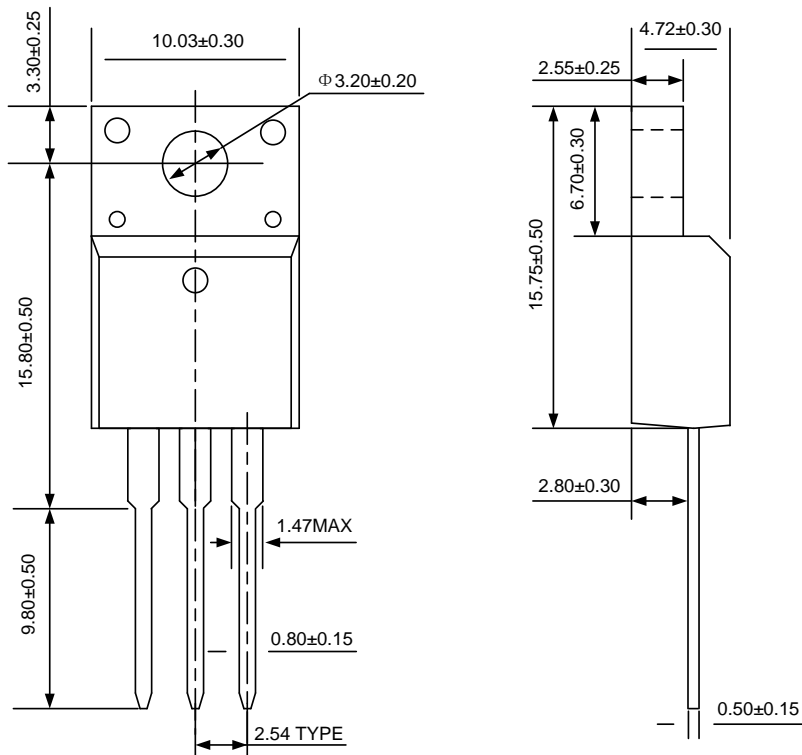
TO-220-3L

UNIT: mm



TO-220F-3L

UNIT: mm



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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	
2010.10.22	1.1	Modify the template of datasheet	
2011.08.26	1.2	Modify "PACKAGE OUTLINE"	
2012.03.28	1.3	Modify "ELECTRICAL CHARACTERISTICS"	
2012.11.15	1.4	Add the curve of "Average Forward Rectified Current "	
2012.12.26	1.5	Modify "ABSOLUTE MAXIMUM RATINGS"	
2013.01.21	1.6	Modify "ABSOLUTE MAXIMUM RATINGS"	