

20A, 60V SCHOTTKY RECTIFIER

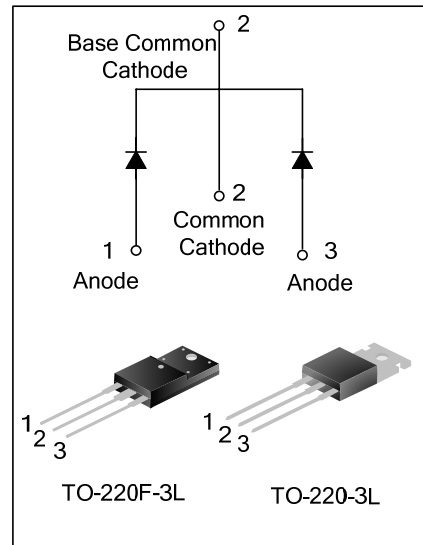
DESCRIPTION

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
- * 125°C Operating Junction Temperature



ORDERING SPECIFICATIONS

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 (Tc=25°C unless otherwise noted)

Parameters	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	60	V
Average Forward Rectified Current	IFAV	20	A
Peak Forward Surge Current@8.3ms	IFSM	150	A
Operation Junction Temperature	TJ	-40~125	°C
Storage Temperature Range	TSTG	-40~125	°C

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
Thermal Resistance, Junction-to-Case	RθJC	2.0	°C/W

ELECTRICAL CHARACTERISTICS (Per Leg)

Parameters	Symbol	Test Condition	Min.	Max.	Unit
Forward Voltage	V_F	$I_F=10\text{ A}; T_J=25^\circ\text{C}$	--	0.71	V
	V_F	$I_F=10\text{ A}; T_J=125^\circ\text{C}$	--	0.61	V
	V_F	$I_F=20\text{ A}; T_J=25^\circ\text{C}$	--	0.85	V
	V_F	$I_F=20\text{ A}; T_J=125^\circ\text{C}$	--	0.71	V
Reverse Current	I_R	$V_R=60\text{V}; T_J=25^\circ\text{C}$	--	100	μA
	I_R	$V_R=60\text{V}; T_J=125^\circ\text{C}$	--	15	mA

CHARACTERISTIC CURVES

Figure 1. Typical forward voltage

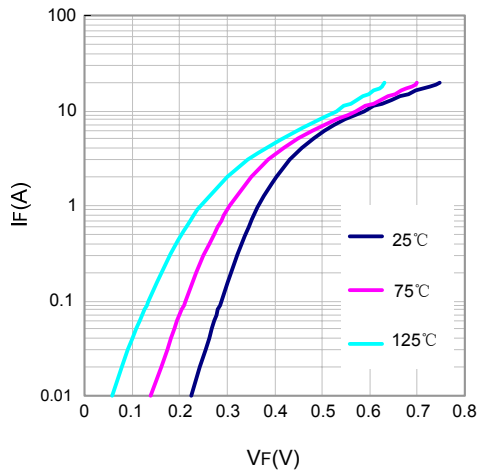


Figure 2. Typical reverse current

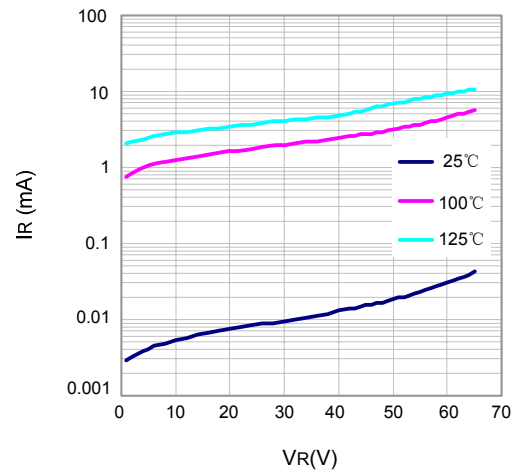
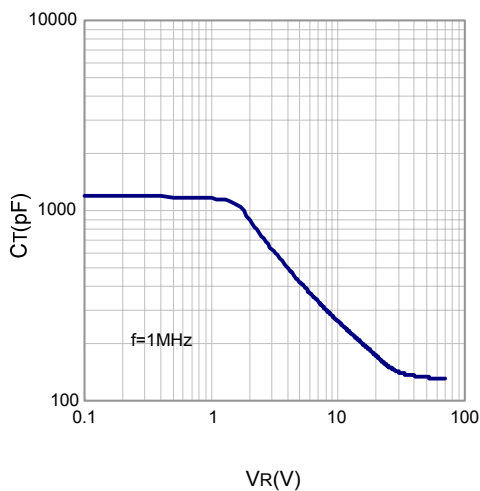


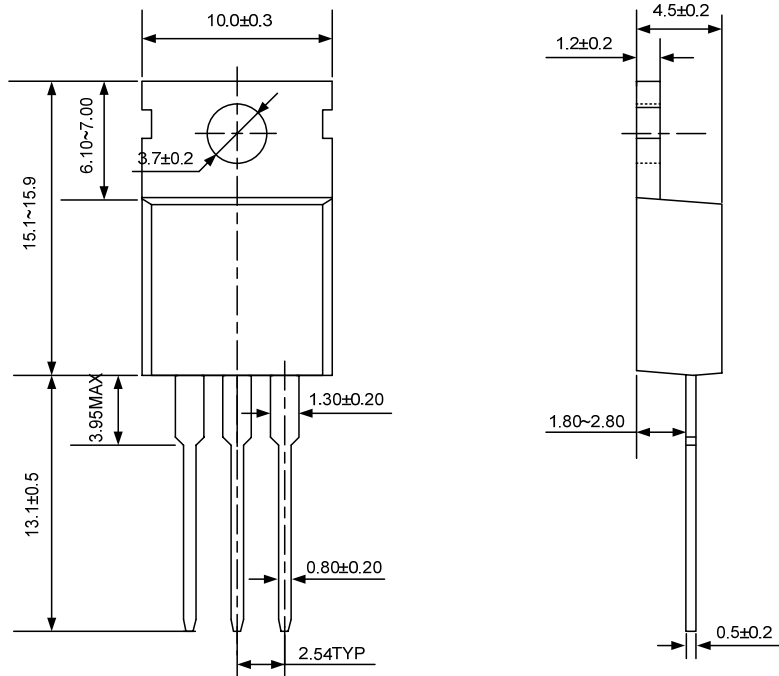
Figure 3. Typical capacitance



PACKAGE OUTLINE

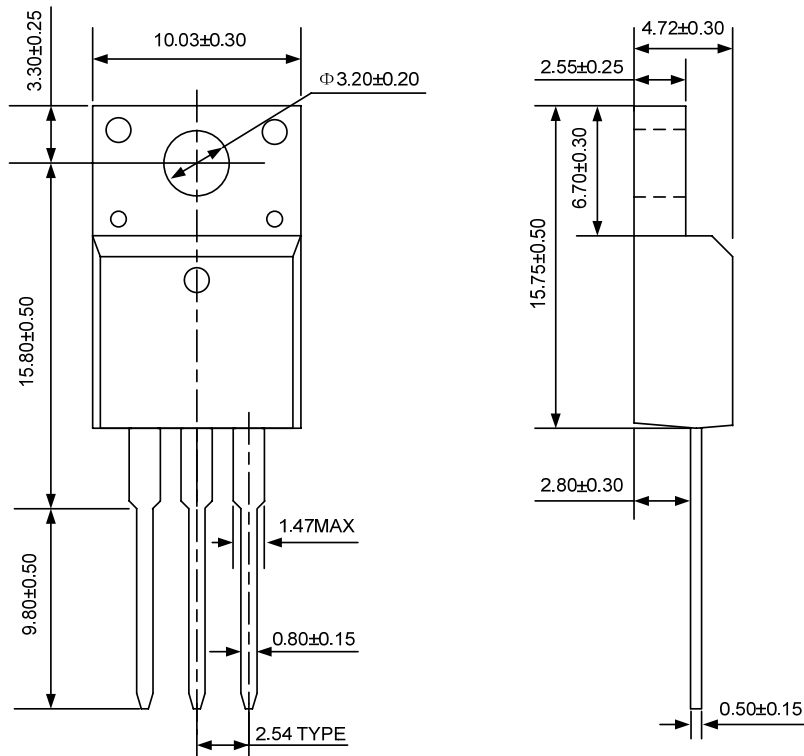
TO-220-3L

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	