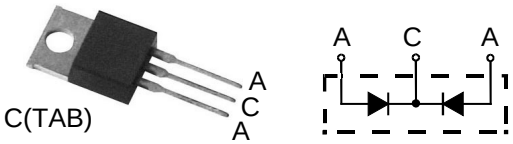
SBL2050CT thru SBL2060CT

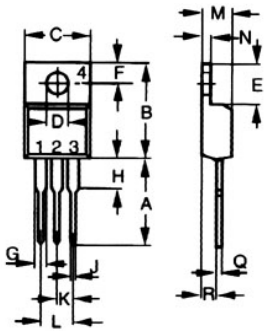
Low V_F Schottky Barrier Rectifiers



A=Anode, C=Cathode, TAB=Cathode

	V_{RRM}	V_{RMS}	V_{DC}
	V	**V**	**V**
SBL2050CT	**50**	35	50
SBL2060CT	**60**	42	60

Dimensions TO-220AB



Dim.	Inches		Milimeter	
	Min.	Max.	Min.	Max.
A	0.500	0.550	12.70	13.97
B	0.580	0.630	14.73	16.00
C	0.390	0.420	9.91	10.66
D	0.139	0.161	3.54	4.08
E	0.230	0.270	5.85	6.85
F	0.100	0.125	2.54	3.18
G	0.045	0.065	1.15	1.65
H	0.110	0.230	2.79	5.84
J	0.025	0.040	0.64	1.01
K	0.100	BSC	2.54	BSC
M	0.170	0.190	4.32	4.82
N	0.045	0.055	1.14	1.39
Q	0.014	0.022	0.35	0.56
R	0.090	0.110	2.29	2.79

Symbol	Characteristics	Maximum Ratings	Unit
$I_{(AV)}$	Maximum Average Forward Rectified Current @T_C=95°C	20	A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	250	A
V_F	Maximum Forward Voltage At 10.0A DC (Note 1)	0.75	V
I_R	Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=100°C	1 50	mA
C_J	Typical Junction Capacitance Per Element (Note 2)	600	pF
$R_{\theta JC}$	Typical Thermal Resistance (Note 3)	2.0	°C/W
T_J	Operating Temperature Range	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

NOTES: 1. 300us Pulse Width, 2% Duty Cycle.
2. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.
3. Thermal Resistance Junction To Case.

FEATURES

* Metal of silicon rectifier, majority carrier conducton
* Guard ring for transient protection
* Low power loss, high efficiency
* High current capability, low V_F
* High surge capacity
* For use in low voltage, high frequency inverters, free whelling, and polarity protection applications

MECHANICAL DATA

* Case: TO-220AB molded plastic
* Polarity: As marked on the body
* Weight: 0.08 ounces, 2.24 grams
* Mounting position: Any

Sirectifier®

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FIG.1 - FORWARD CURRENT DERATING CURVE

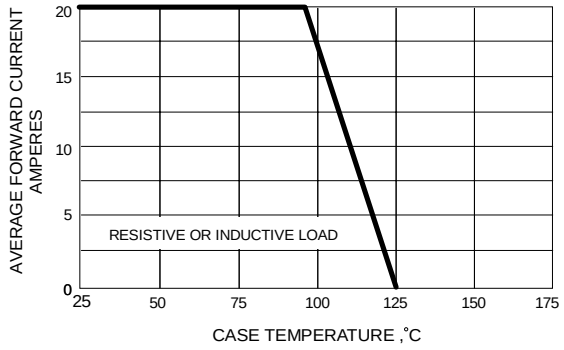


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

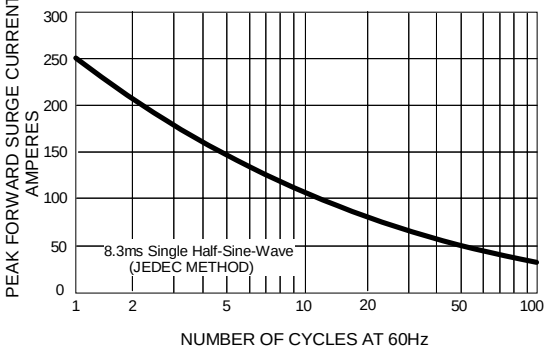


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

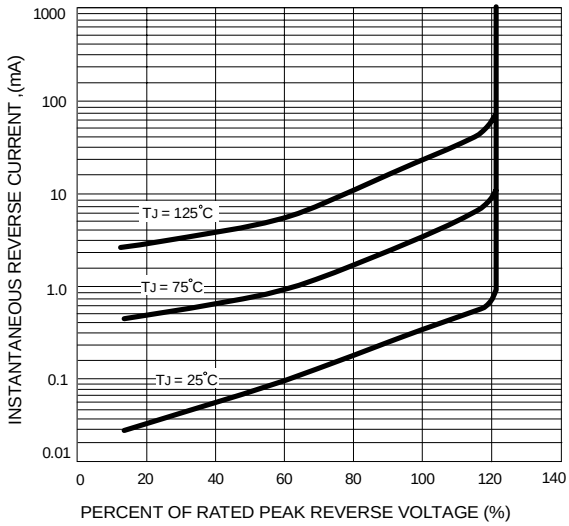


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

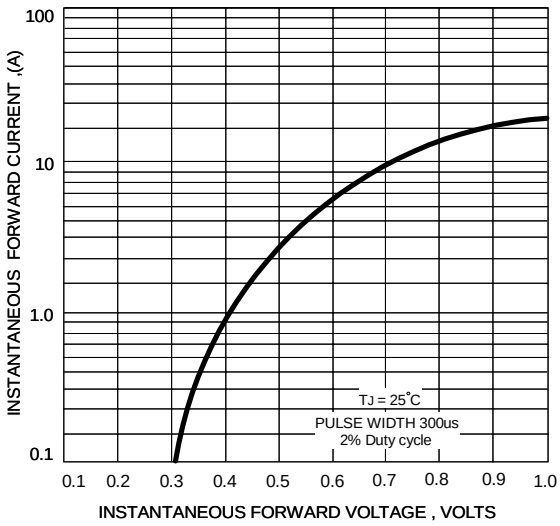
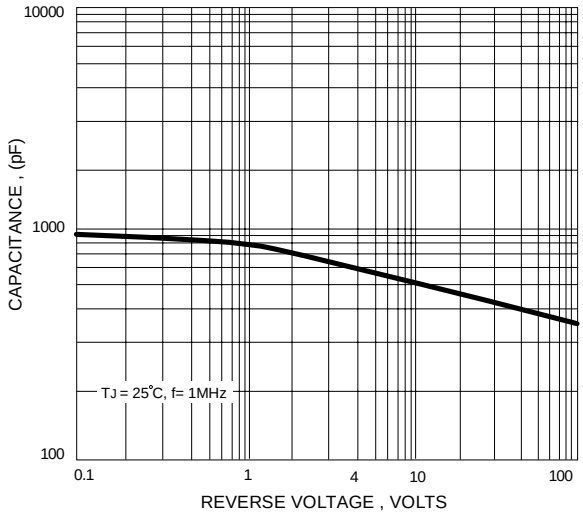


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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