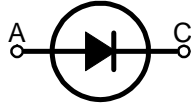
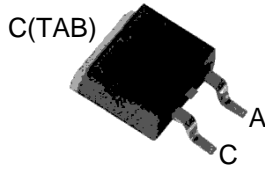


# SBG1030 thru SBG1045

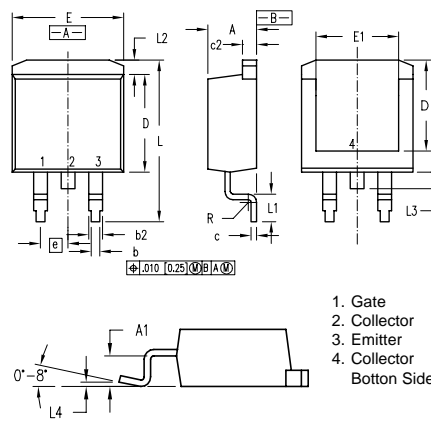
## Low $V_F$ Schottky Barrier Rectifiers



A=Anode, C=Cathode, TAB=Cathode

	$V_{RRM}$ V	$V_{RMS}$ V	$V_{DC}$ V
<b>SBG1030</b>	30	21	30
<b>SBG1035</b>	35	24.5	35
<b>SBG1040</b>	40	28	40
<b>SBG1045</b>	45	31.5	45

Dimensions TO-263(D<sup>2</sup>PAK)



1. Gate
2. Collector
3. Emitter
4. Collector Bottom Side

Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.06	4.83	.160	.190
A1	2.03	2.79	.080	.110
b	0.51	0.99	.020	.039
b2	1.14	1.40	.045	.055
c	0.46	0.74	.018	.029
c2	1.14	1.40	.045	.055
D	8.64	9.65	.340	.380
D1	8.00	8.89	.315	.350
E	9.65	10.29	.380	.405
E1	6.22	8.13	.245	.320
e	2.54 BSC		.100 BSC	
L	14.61	15.88	.575	.625
L1	2.29	2.79	.090	.110
L2	1.02	1.40	.040	.055
L3	1.27	1.78	.050	.070
L4	0	0.20	0	.008
R	0.46	0.74	.018	.029

Symbol	Characteristics	Maximum Ratings	Unit
$I_{(AV)}$	Maximum Average Forward Rectified Current @ $T_c=95^\circ\text{C}$	10	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 5A DC (Note 1)	0.60	V
$I_R$	Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=100^\circ\text{C}$	1.0 50	mA
$C_J$	Typical Junction Capacitance (Note 2)	280	pF
$R_{\theta JC}$	Typical Thermal Resistance (Note 3)	3.0	$^\circ\text{C}/\text{W}$
$T_J$	Operating Temperature Range	-55 to +125	$^\circ\text{C}$
$T_{STG}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$

- 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 conduction
- \* 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: D<sup>2</sup>PAK molded plastic
- \* Polarity: As marked on the body
- \* Weight: 0.06 ounces, 1.7 grams



# SBG1030 thru SBG1045

## Low $V_F$ Schottky Barrier Rectifiers

