

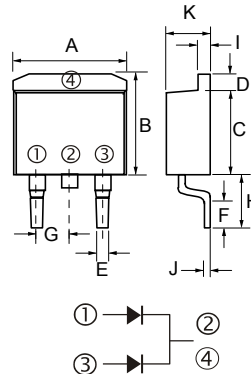
Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: TO-263AB(D²PAK), Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**

TO-263AB/ D²PAK



TO-263AB/ D ² PAK		
DIM.	MIN.	MAX.
A	9.80	10.20
B	9.60	10.60
C	8.50	9.20
D	----	1.67
E	0.51	1.01
F	2.10	2.50
G	2.44	2.64
H	4.40	4.70
I	1.10	1.40
J	0.30	0.64
K	4.40	4.80

All Dimensions in millimeter

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SB 2040DC	SB 2045DC	SB 2050DC	SB 2060DC	SB 2080DC	SB 20100DC	SB 20150DC	SB 20200DC	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	45	50	60	80	100	150	200	V
RMS Reverse Voltage	V _R (RMS)	28	31	35	42	56	70	105	140	V
Average Rectified Output Current @T _L = 75° C (Note 1)	I _O	20								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200								A
Forward Voltage @I _F = 10A	V _{FM}	0.70		0.80		0.85		0.92		V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	0.1 20								mA
Typical Junction Capacitance (Note 2)	C _j	350		280		200				pF
Typical Thermal Resistance (Note 1)	R θ JA	3								°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150								°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

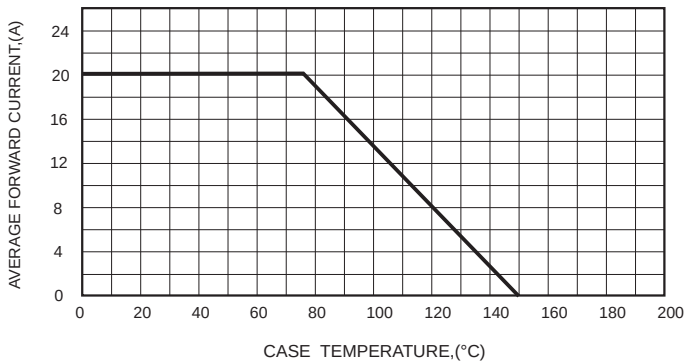


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

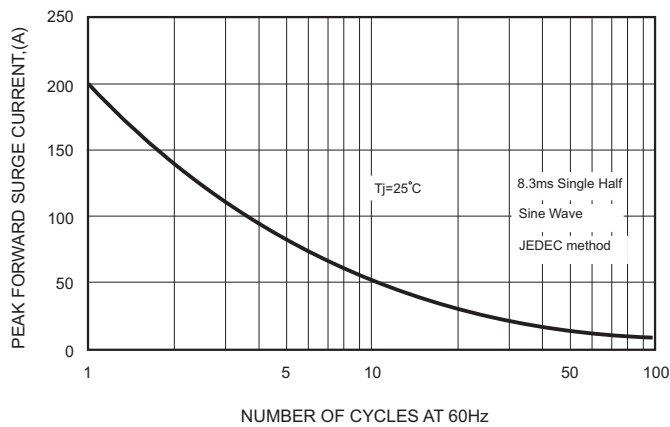


FIG.2-TYPICAL FORWARD CHARACTERISTICS

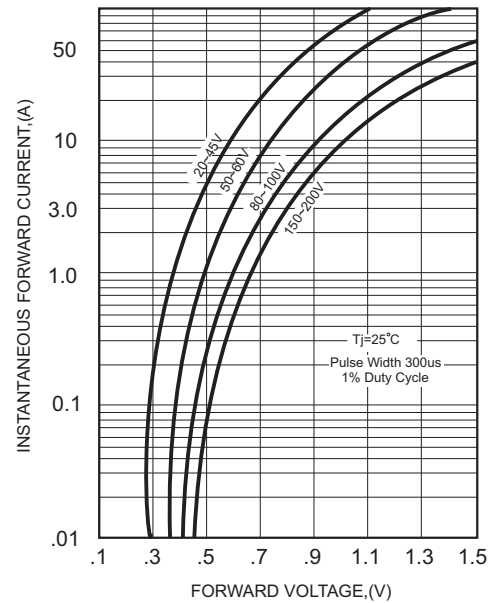


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

