

SKBPC25/35 BRIDGE RECTIFIER

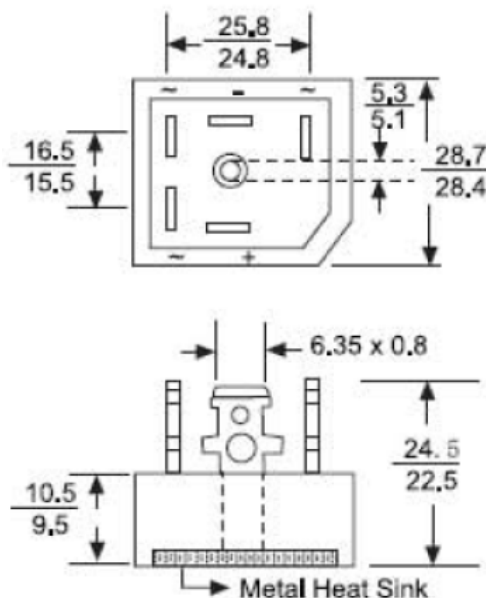
Features

- Diffused junction
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Ideal for printed circuit boards
- This is Pb-Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data

- Case: Epoxy case with heat sink internally mounted in the bridge encapsulation
- Terminals: Plated leads solderable per MIL-STD-202, method 208
- Polarity: As marked on body
- Weight: 2.0 grams(approx.)
- Mounting position: Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency.
- Marking: Part Name,SSG and Date Code

Mechanical Dimensions: mm



SKBPC



Technical Data
Data Sheet N0538, Rev. -

Green Products

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS												
Rating at 25°C ambient temperature unless otherwise specified. Sing phase, half wave, 60Hz, resistive or inductive load, For capacitive load, derate current by 20%												
VOLTAGE RATINGS												
Type Number		-00	-01	-02	-04	-06	-08	-10	-12	-14	-16	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	1200	1400	1600	V
Working Peak Reverse Voltage	V _{RWM}											
DC Blocking Voltage	V _R											
Peak Non-Repetitive Reverse Voltage	V _{RSM}	75	150	275	500	725	900	1100	1300	1500	1700	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	840	980	1120	V
FORWARD CONDUCTION												
Type Number		SKBPC 25					SKBPC 35					UNITS
Maximum Average Forward Rectified Current @ T _c = 100°C	I _{F(AV)}	25					35					A
Non-Repetitive Peak Forward Surge Current (No Voltage Reapplid t=8.3ms at 60Hz) (No Voltage Reapplid t=10ms at 50Hz) (100% V _{RRM} Reapplid t=8.3ms at 60Hz) (100% V _{RRM} Reapplid t=10ms at 50Hz)	I _{FSM}	375 360 314 300					500 475 420 400					A
I ² t Rating for fusing (No Voltage Reapplid t=8.3ms at 60Hz) (No Voltage Reapplid t=10ms at 50Hz) (100% V _{RRM} Reapplid t=8.3ms at 60Hz) (100% V _{RRM} Reapplid t=10ms at 50Hz)	I ² t	580 635 410 450					1030 1130 730 800					A ² S
Forward Voltage (per element) @T _J = 25°C, @I _F =40Apk per single junction	V _F	1,2					1,2					V
Peak Reverse Current (per leg) @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R						10 5.0					uA mA
RMS Isolation Voltage from Case to Lead	V _{ISO}						2500					V
THERMAL CHARACTERISTICS												
Operating Temperature Range	T _J						-40 to + 125					°C
Storage Temperature Range	T _{STG}						-40 to + 150					°C
Thermal Resistance Junction to Case at DC Operation per Bridge	R _{θJC}	1,42					1,16					K/W
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	R _{θCS}						0,2					K/W

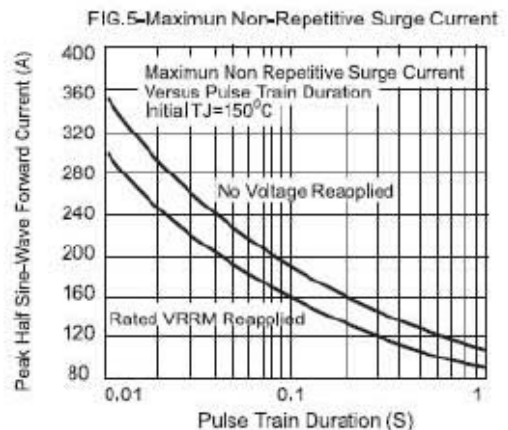
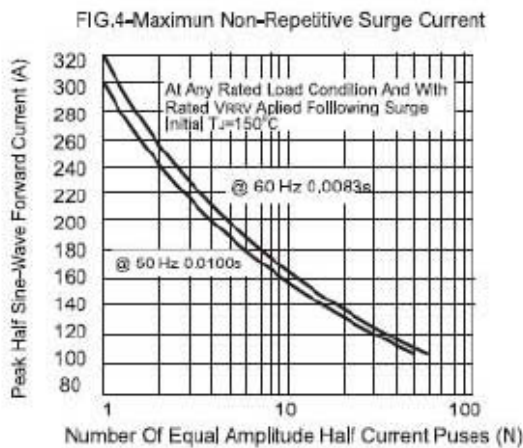
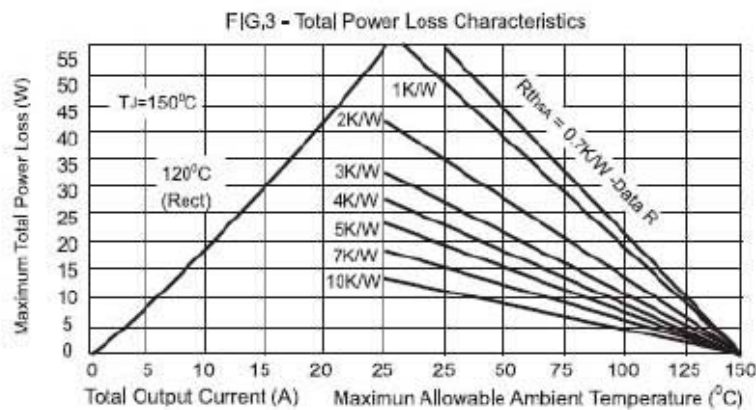
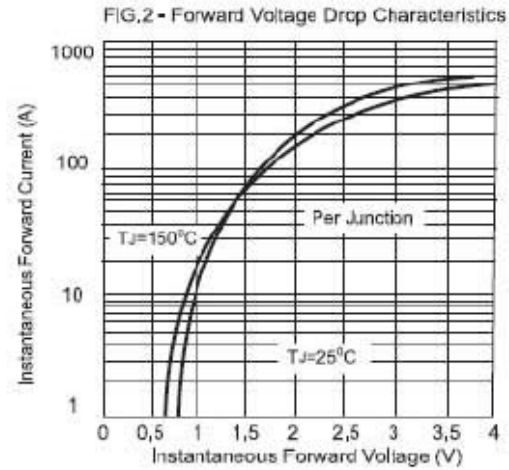
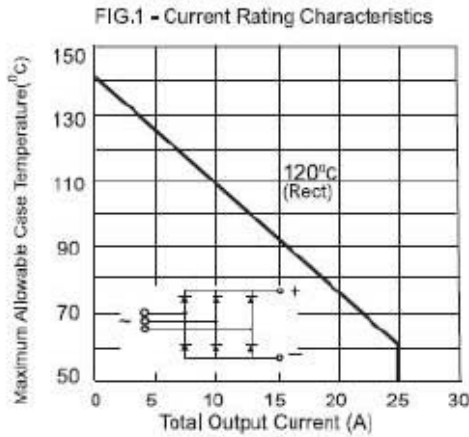


FIG.11 - Thermal Impedance Z_{thJC} Characteristics

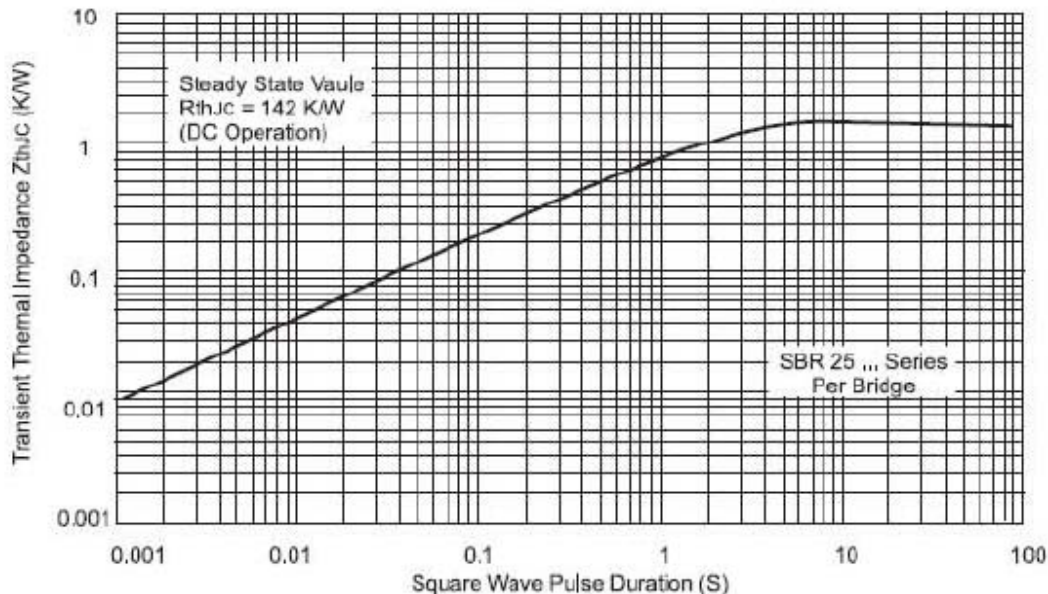
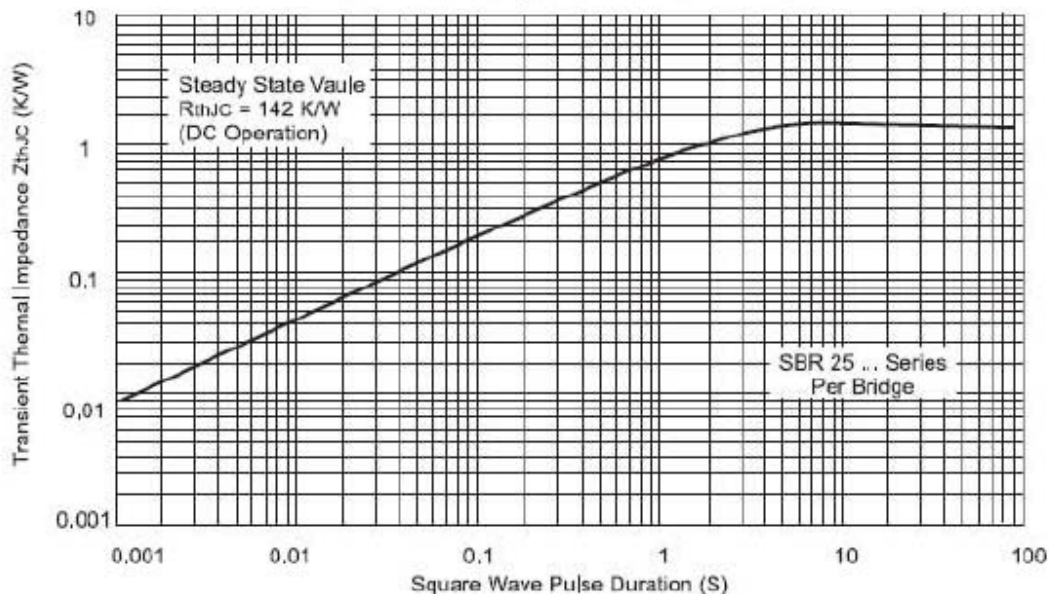


FIG.12 - Thermal Impedance Z_{thJC} Characteristics





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