

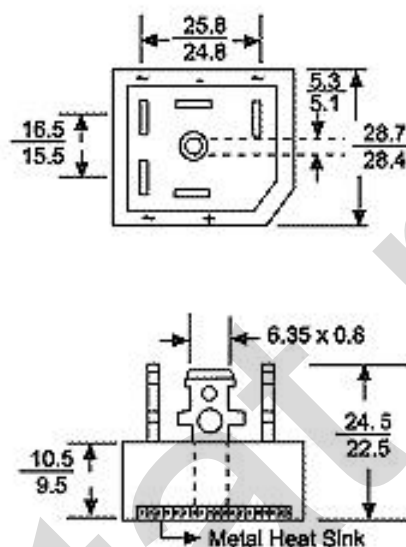
SKBPC/SBR25A/35A SERIES

FEATURES

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

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: 20 grams (approx.)
- Mounting Position: Bolt Down on Heatsink With Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency
- Mounting Torque: 20 in lbs. Max.
- Marking: Type Number



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/SBR25					SKBPC/SBR35					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)	I _{FSM}	375					500					A
(No Voltage Reapplid t=10ms at 50Hz)		360					475					
(100% V _{RRM} Reapplid t=8.3ms at 60Hz)		314					420					
(100% V _{RRM} Reapplid t=10ms at 50Hz)		300					400					
I ² t Rating for fusing (No Voltage Reapplid t=8.3ms at 60Hz)	I ² t	580					1030					A ² S
(No Voltage Reapplid t=10ms at 50Hz)		635					1130					
(100% V _{RRM} Reapplid t=8.3ms at 60Hz)		410					730					
(100% V _{RRM} Reapplid t=10ms at 50Hz)		450					800					
Forward Voltage (per element) @ T _J = 25°C, @ I _{FM} = 40A per single junction	V _F	1.26					1.19					V
Peak Reverse Current (per leg) @ T _J = 25°C	I _R						10					uA
At Rated DC Blocking Voltage @ T _J = 125°C							5.0					
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	