



SBR/SKBPC15005 Thru SBR/SKBPC1510 High Efficient Rectifiers

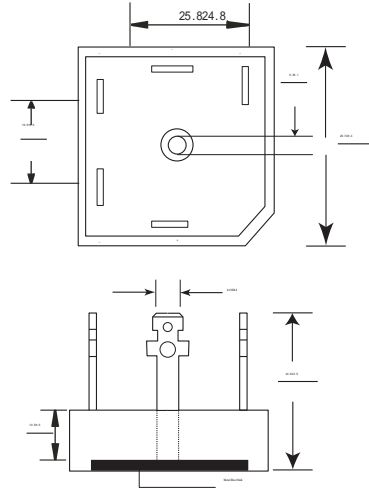
Voltage Range
-50 to 1000 Volts
Current
-15.0 Ampere

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
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 AC ambient temperature unless otherwise specified.

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

VOLTAGE RATINGS

CHARACTERISTICS	SYMBOL	-00	-01	-02	-04	-06	-08	-10	-12	-14	-16	UNT
Peak Repetitive Reverse Voltage	VARRM											V
Working Peak Reverse Voltage	VRWM	50	100	200	400	600	800	1000	1200	1400	1600	
DC Blocking Voltage	VR											
Peak Non-Repetitive Reverse Voltage	VRSM	75	150	275	500	725	900	100	1300	1500	1700	V
PMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	V

FORWARD CONDUCTION

CHARACTERISTICS	SYMBOL	MT15	UNIT
Maximum Average Forward Rectified Current @ Tc=100°C	IO	15	A
Non-Repetitive Peak Forward Surge Current (No voltage Reapplied t=8.3ms at 60Hz) (No voltage Reapplied t=10ms at 50Hz) (100% VRRM Reapplied t=8.3ms at 60Hz) (100% VRRM Reapplied t=10ms at 50Hz)	IFMS	375 360 314 300	A
I2t Rating for fusing (No voltage Reapplied t=8.3ms at 60Hz) (No voltage Reapplied t=10ms at 50Hz) (100% VRRM Reapplied t=8.3ms at 60Hz) (100% VRRM Reapplied t=10ms at 50Hz)	I2t	580 635 410 450	A.S
Forward Voltage (per element) @TJ=25°C, @LFOM=40APK per single junction	VF	1.26	V
Peak Reverse Current (per leg) @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10 5.0	uA mA
RMS Isolation Voltage from Case to Lead	VIso	2500	V

THERMAL CHARACTERISTICS

Operating Temperature Range	TJ	-40 to +150	°C
Storage Temperature Range	TSTG	-40 to +150	°C
Thermal Resistance Junction to Case at DC Operation per Bridge	RQJC	1.42	K/W
Thermal Resistance Case to Case to Heatsink Mounting Surface, Smooth, Flat and Greased	RQCS	0.2	K/W