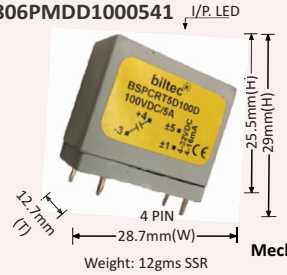
SOLID STATE RELAY

ISO 9001:2015 & ISO 14001:2015 CERTIFIED by InterConformity GmbH

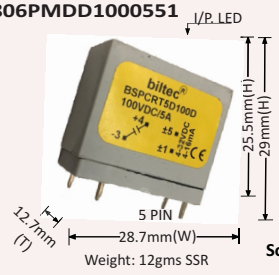
5AMP-MODEL BSPCTRSD100D
BSC806PMDD1000541



Weight: 12gms SSR

Equivalent to OMRON - O/E/N Mechanical RELAY G2R1/58.

5AMP-MODEL BSPRCTRSD100D-2
BSC806PMDD1000551



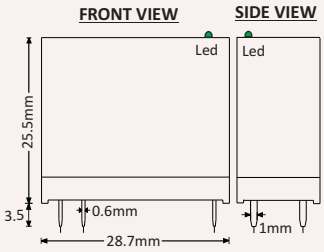
Weight: 12gms SSR

Equivalent to OMRON/FUJI Solid State RELAY

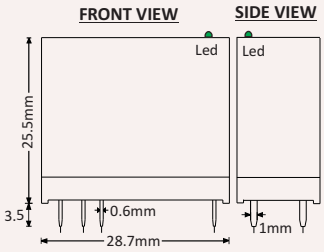
OUTPUT DC CONTROL COOL POWER MOSFET CONTROL TECHNOLOGY

- Switching Speeds are Inherently Faster.
- No need to De-rate Power Handing Capacity.
- Input LED Indication
- Ultra Low on State Resistance
- Ultra Low Output Leakage Current
- Isolated Drivers
- N/O Configurations only.
- Reverse Polarity Free Input

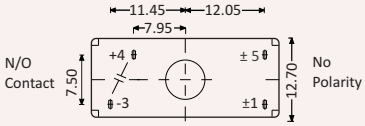
FRONT VIEW **SIDE VIEW**



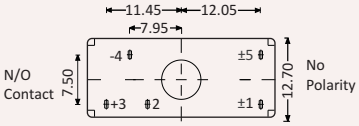
FRONT VIEW **SIDE VIEW**



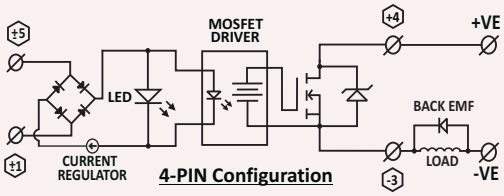
BOTTOM VIEW



BOTTOM VIEW

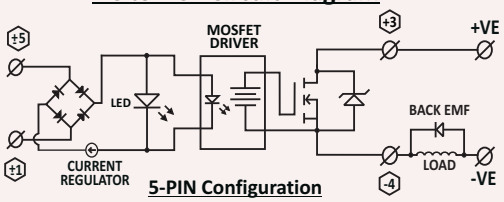


DC to DC - Circuit Diagram



4-PIN Configuration

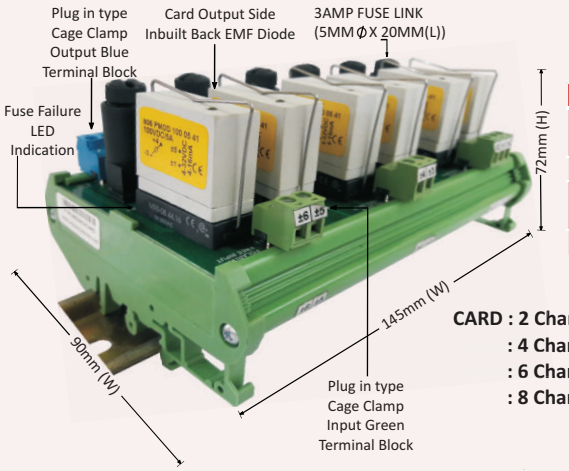
DC to DC - Circuit Diagram



5-PIN Configuration

∗ Across the load back emfdiode is must for high ON/OFF

MODEL BTC 806 INTERFACE RELAY CARD - 6 CHANNEL



CARD : 2 Channel
: 4 Channel
: 6 Channel
: 8 Channel

Difference Between Power MOSFET & Transistor

Power MOSFET	Transistor
High Speed ON/OFF (High Frequency)	Low Speed ON/OFF
High Power Capacity	Low Power Capacity
Voltage Drop Across Power MOSFET is Less	Voltage Drop Across Transistor is more
Size of Heat sink less	Size of Heat sink is more

General Specification	
Max Barrier Layer Temperature (T_{max})	< 125 °C
Ambient Temperature Range (T_{amb})	0-85 °C
SSR Storage Temperature Range (T_{st})	-40°C to 80°C
Housing Material	UL-94 V0 Grade
SSR Weight	12 grams
Test Standards:	ROHS,IP20
Pending Approvals:	UL 508,VDE ,TUV ,CSA 22-2 IEC 60947-5-1:2016 IEC 62314:2006

Input Technical Specifications		
Parameters	**Unit**	**PMDD/RDD**
Control Voltage Range	V	4-32 VDC
Reverse Polarity Protection	-	Polarity Free
Control Supply Current Consumption	mA	4-16 mA
Input Impedance (Current Regulator Circuit Impedance)	Ω	1 kΩ - 2 kΩ
Minimum Turn ON Voltage	VDC	3.5 VDC
Turn OFF Voltage	VDC	< 3.25 VDC
Control Input Status Indication	-	Green LED Indication

Output Technical Specifications @ 25°C Unless Specified			
Parameters	**Symbol**	**Unit**	**100V / 05Amp**
Output Circuit - Switching Element	**POWER MOSFET**		
Operating Output DC Voltage Range	V	VDC	5-100
Continuos Drain Current @ 20°C	***I_D***	***Amp***	***5***
Continuos Drain Current @ 55°C	***I_D***	***Amp***	***2.5***
Maximum Drain To Source Break Down Voltage	$V_{(BR)DSS}$	VDC	100
Static Drain To Source ON Resistance	$R_{DS(ON)}$	Ohm	0.03
On state Voltage Drop @ Rated Current	V_{DSS}	VDC	< 0.7
Power Dissipation	P_D	W	150
Required minimum LOAD current	mA_{DC}	mA	3
Max. OFF State Drain To Source Leakage Current @V_{GS}=0, T_j=125°C	I_{DSS}	mA	0.2
Pulsed Drain current (less than 60 µS Pulse)	I_{DM}	Amp	100
Output Capacitance	C_{OSS}	pF	300
Peak Diode Recovery dv/dt	dv/dt	V/nS	5
SSR Turn ON Delay Time	$T_{D(ON)}$	mS	1.8
SSR Turn Off Delay Time	$T_{D(OFF)}$	mS	< 0.04
Minimum Isolation Resistance between Input Terminals (±5,±1) to Output Terminals (-3,+4) @ 500 VDC	Ω	GΩ	1
Isolation Voltage Input Terminals (±5,±1) to Output Terminals (-3,+4) for 1 Minute	V_{ISO}	kV	2.5
Maximum Junction Temperature	$T_{j(max.)}$	°C	150 °C
Thermal Resistance Rθ (Junction To Case)	$R_{\theta(j-c)}$	°C/W	0.7