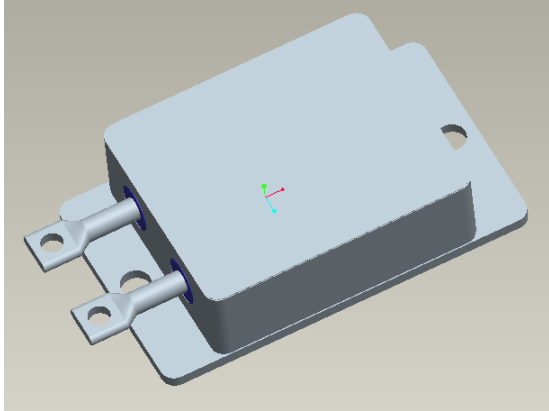


SML70BBPM



FEATURES

- HIGH RELIABILITY ISOLATED HERMETIC MODULE
- BATTERY BY-PASS CIRCUIT
- SMALL FOOTPRINT
- TERMINALS SUITABLE FOR SCREW FIXING TO BUSBAR (M2)/PRE TINNED FOR WIRE WRAP SOLDERING (*To be specified)

Maximum Rated Values (At $T_C=25^\circ\text{C}$ unless otherwise stated)

Symbol	Name	Conditions	Value	Unit
I_D^*	Discharge Current	$T_C = 60^\circ\text{C}$	70	A
I_C^*	Charge Current	$T_C = 60^\circ\text{C}$	60	A
T_J	Junction Temperature		150	$^\circ\text{C}$
T_{OP}	Operating Temperature		-55...+125	$^\circ\text{C}$
T_{ST}	Storage Temperature		-55...+125	$^\circ\text{C}$

*Pulse Test: $PW=380\mu\text{s}$, $\delta\leq 1\%$

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders

Document No : 7282
Issue : 2

SML70BBPM
Characteristic Values

Symbol	Name	Conditions	min.	typ.	max.	Unit
V _{C1}	Forward Charge Voltage	I _F = 350mA [*] , T _C = 25°C	-	2.15	2.24	V
V _{C2}	Forward Charge Voltage	I _F = 5A [*] , T _C = 25°C	-	2.50	2.58	V
V _{C3}	Forward Charge Voltage	I _F = 10A [*] , T _C = 25°C	-	2.60	2.70	V
V _{C4}	Forward Charge Voltage	I _F = 15A [*] , T _C = 25°C	-	2.70	2.79	V
V _{C5}	Forward Charge Voltage	I _F = 20A [*] , T _C = 25°C	-	2.75	2.86	V
V _{C6}	Forward Charge Voltage	I _F = 25A [*] , T _C = 25°C	-	2.81	2.92	V
V _{C7}	Forward Charge Voltage	I _F = 30A [*] , T _C = 25°C	-	2.87	2.98	V
V _{C8}	Forward Charge Voltage	I _F = 60A [*] , T _C = 25°C	-	3.16	3.27	V
V _{D1}	Forward Discharge Voltage	I _F = 5A [*] , T _C = 25°C	-	309	335	mV
V _{D2}	Forward Discharge Voltage	I _F = 10A [*] , T _C = 25°C	-	340	370	mV
V _{D3}	Forward Discharge Voltage	I _F = 15A [*] , T _C = 25°C	-	365	390	mV
V _{D4}	Forward Discharge Voltage	I _F = 20A [*] , T _C = 25°C	-	369	400	mV
V _{D5}	Forward Discharge Voltage	I _F = 25A [*] , T _C = 25°C	-	382	410	mV
V _{D6}	Forward Discharge Voltage	I _F = 30A [*] , T _C = 25°C	-	394	420	mV
V _{D7}	Forward Discharge Voltage	I _F = 40A [*] , T _C = 25°C	-	417	450	mV
V _{D8}	Forward Discharge Voltage	I _R = 70A [*] , T _C = 25°C	-	478	520	mV
I _{FF}	Leakage Current (Charge)	V _F = 1.7V [*] , T _C = 25°C	-	-	15	mA
I _{FF}	Leakage Current (Charge)	V _F = 1.7V [*] , T _C = 60°C	-	-	80	mA
V _{C(-55)}	Forward Charge Voltage	I _F = 60A [*] , T _C = -55°C	-	-	3.5	V
V _{D(-55)}	Forward Discharge Voltage	I _R = 70A [*] , T _C = -55°C	-	-	0.65	V

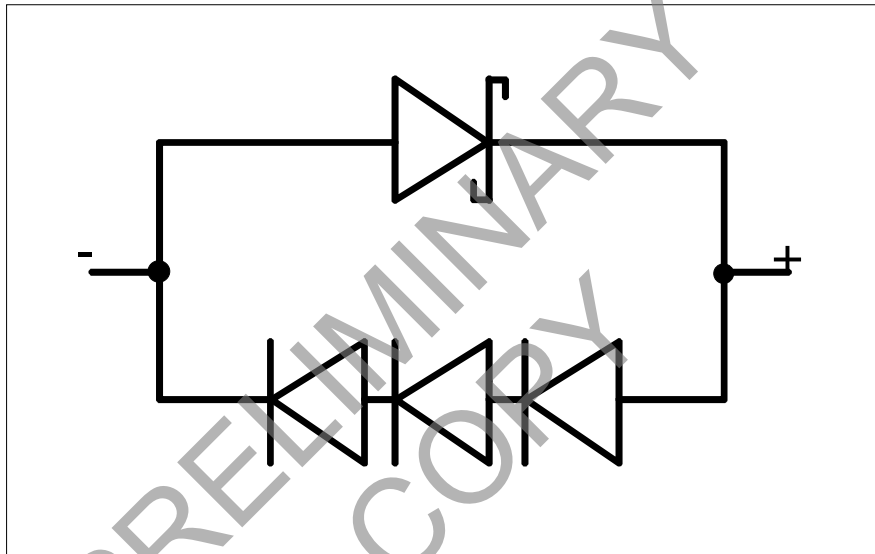
*Pulse Test: PW=380µs, δ≤1%

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Mechanical And Thermal Properties

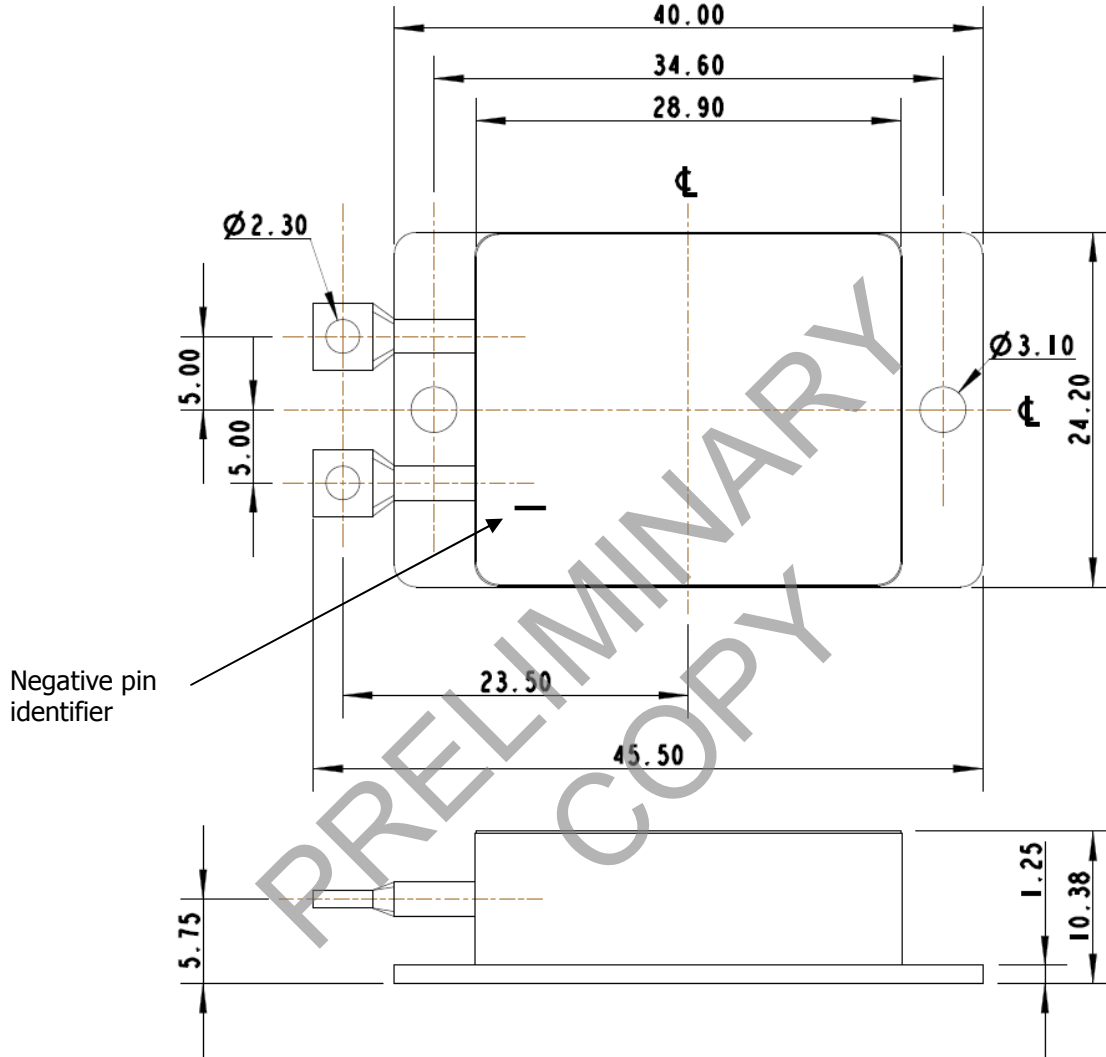
Symbol	Name	Conditions	min.	typ.	max.	Unit
R _{thJC}	Thermal Resistance Junction to Case	Discharge condition	-	2.2	-	°CW ⁻¹
		Charge condition	-	0.3	-	°CW ⁻¹
M	Mounting Torque	module mounting screw terminals	TBA TBA	- -	TBA TBA	Nm Nm
W	Module Weight		-	35	-	g

Electrical Schematic



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Package Outline and Pin Configuration



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