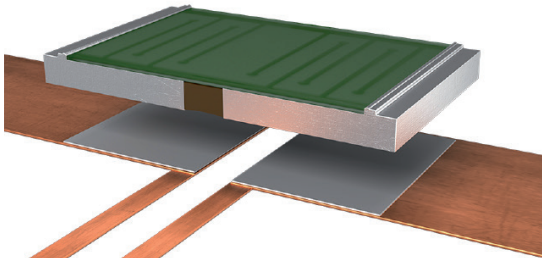




PMT // Size 2817

PRELIMINARY VERSION



Features

- Constant current up to 10 A (50 mOhm)
- Excellent pulse load capability
- Mounting: Reflow-, and IR-soldering
- AEC-Q200 qualification in preparation
- RoHS 2011/65/EU compliant



Applications

- Control systems for the automotive market
- Suitable for pulse loads in BEV applications
- Power modules
- Snubber circuits
- Circuit protection in filter applications
- Precharging / discharging applications

Technical data

Resistance values	Ohm	0.050 / 0.5 / 1 / 2.5 *
Tolerance	%	10
Applicable temperature range	°C	-65 to +170
Internal heat resistance (R_{thi})	K/W	22
Dielectric withstanding voltage	V AC/DC	200
Inductance	nH	<3
Stability (at rated power) deviation after 2000h T_k = Terminal temperature	%	<0.5 ($T_k = 75^\circ\text{C}$) <1.0 ($T_k = 105^\circ\text{C}$)

* For detailed information see table on page 2

Ordering code

PMT - R050 - 10.0

- Tolerance
- Resistance value [Ohm] / "R" represents decimal point
- Type



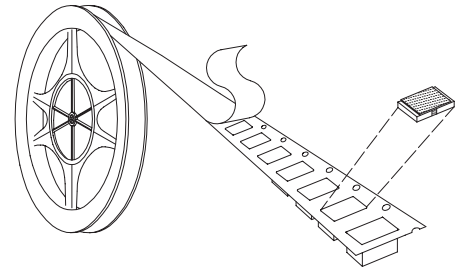
PMT // Size 2817

Recommended solder profile

Reflow- and IR-soldering

Temperature	°C	260	255	217
Time	sec	peak	40	90

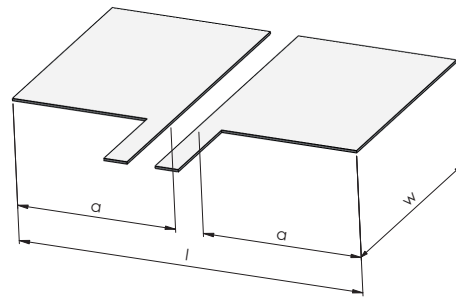
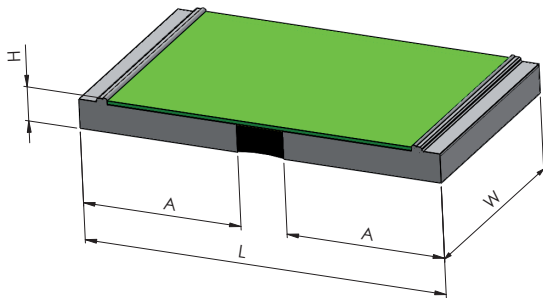
Slight deformations during soldering do not affect technical properties of the component.



Tape and reel information

Specification	DIN EN 60286-3		
Tape width	mm	12	
Reel size	inch	13	
Parts per reel	pcs	5000	
Packaging weight	g	494	

Mechanical dimensions and pcb-layout proposal (Reflow-soldering) [mm]



Type	L	W	H	A
PMT	7.1 ± 0.2	4.2 ± 0.1	0.8 ± 0.2	3.1

solder pad	l	w	a
PMT	7.4	4.6	3.4

Application examples

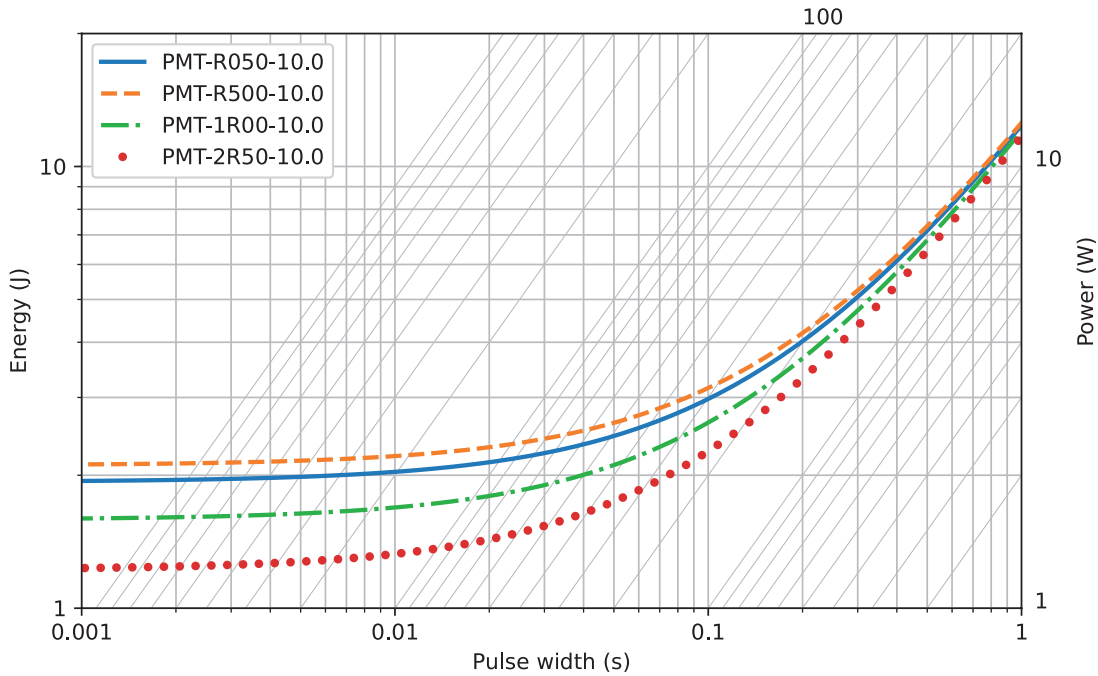
Load (J)	Array-Resistance (Ω)	Used Part	Array		#Shunts
			series	parallel	
1	0.025	PMT-R050-10.0	4	8	32
1	1	PMT-1R00-10.0	2	2	4
3	5	PMT-1R00-10.0	5	1	5
3	10	PMT-2R50-10.0	4	1	4
5	0.083	PMT-R500-10.0	1	6	6
5	0.5	PMT-R500-10.0	3	3	9
5	0.5	PMT-1R00-10.0	2	4	8
5	1.5	PMT-1R00-10.0	3	2	6
5	1.5	PMT-R500-10.0	6	2	12
10	5	PMT-2R50-10.0	6	3	18
10	10	PMT-2R50-10.0	8	2	16
25	10	PMT-1R00-10.0	20	2	40
50	35	PMT-2R50-10.0	28	2	56

Other configurations are also possible. Please contact us for further information or support for your application.



PMT // Size 2817

Maximum pulse energy and pulse power for a single event (@ $T_{max}=170^{\circ}C$)



Specification

Parameters	Test conditions	Specified values
Temperature Cycling	2000 cycles (-55 °C to +150 °C)	tbd – qualification in preparation
Low Temperature Storage and Operation	-65 °C for 24 h	
Resistance to Soldering Heat	260 °C for 10 sec / 8h steam aging	
Moisture Resistance	MIL-STD-202 method 106	
Mechanical Shock	100 g, 6 ms half sine	
Vibration, High Frequency	20 g, 1-2000 Hz	
Operational Life	2000 h, T_k max at rated power	
High Temperature Exposure	2000 h / 170 °C	
Bias Humidity	+85 °C, 85 r.F., 1000 h	
Pulse load	tbd	

Disclaimer // All products, product specifications and data are subject to change without notice.

The product specifications do not expand or otherwise modify Isabellenhütte’s terms and conditions of sale, including but not limited to, the warranty expressed therein. Isabellenhütte makes no warranty, representation or guarantee other than as set forth in its terms and conditions of sale.

Information provided in datasheets and/or specifications may vary from actual results in different applications. Any statements made by Isabellenhütte regarding the suitability of products for certain types of applications are based on its knowledge of typical requirements that are often placed on its products. It is the customer’s responsibility to validate that a particular product with the properties described in the product specification is suitable for use in the application intended.

No license, express or implied, or otherwise, to any intellectual property rights is granted by this document.

Any and all liability arising out of the application or use of any product shall be as set forth in Isabellenhütte’s terms and conditions of sale.

