Features

>Glass passiated junction

>Surface mount SOD-BLOCK

>Un-directional

>Very Low Clamping Voltage

>High Temperature soldering:260°C/10 seconds at terminals

>Continued current transient suppressor

>RoHScompliant

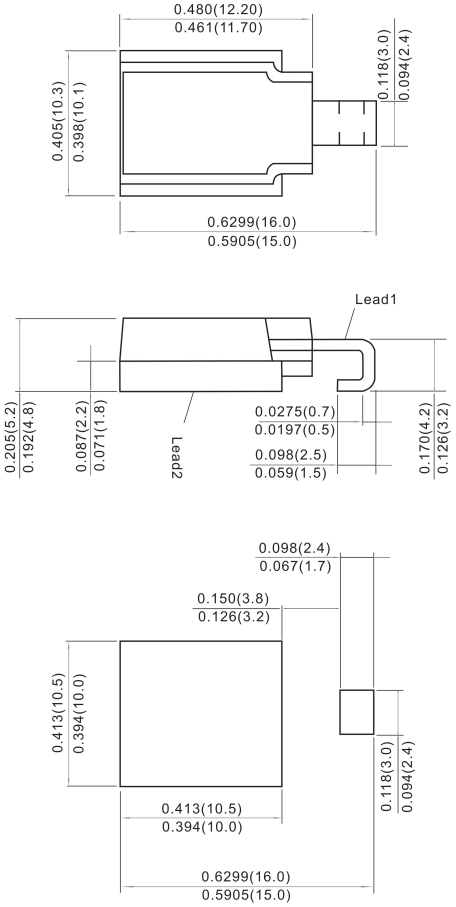
>8KW peak pulse power capability on 10/1000us waveform

IEC COMPATIBILITY

>ISO 7637-2 5a 12v System (87V 2Ω 400ms 10c)
24v System (150V 4Ω 350ms 10c)

Package Dimensions

SOD-BLOCK



APPLICATIONS

>Auto powers system
>Can-bus
>ABS powers
>Car audio and video
>Automotive instrument
>Bluetooth
>Car GPS

Electrical Characteristics

Part Numbers	Standoff Voltage(Vdc)Volts	Reverse Leakage	Breakdown Voltage(Vbr)@IT		Test Current IT	Max. Clamping Voltage Vcl@Ipp 10/1000us	
UN	Vrwm(V)	IR(uA)	Min.	max.	mA	Vcl（V）	Ipp（A）
PKD18A	18	2	20.0	22.1	5	29.2	274.0
PKD20A	20	2	22.2	24.5	5	32.4	246.9
* PKD22A	22	2	24.0	26.9	5	35.5	225.4
PKD24A	24	2	26.7	29.5	5	38.9	205.7
PKD26A	26	2	28.9	31.9	5	42.1	190.0
PKD30A	30	2	33.3	36.8	5	48.4	165.3
PKD33A	33	2	36.7	40.6	5	53.3	150.1
* PKD36A	36	2	40.0	44.2	5	58.1	137.7
PKD43A	43	2	47.8	52.8	5	69.4	115.3

* Commonly used models

Test ISO 7637-2 pulse 5a

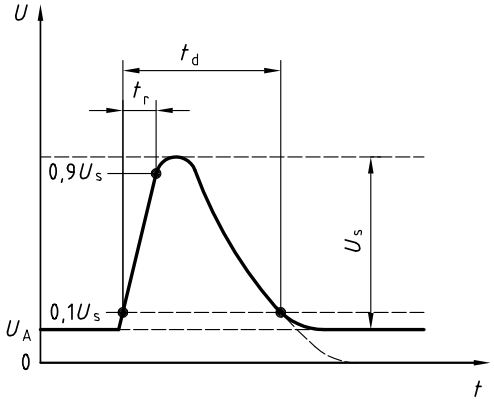


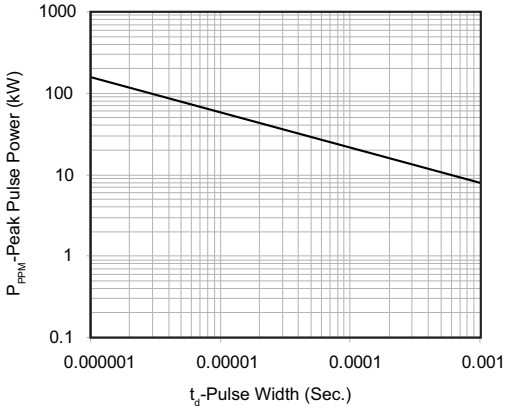
Figure 11 — Test pulse 5a

Table 9 — Parameters for test pulse 5a

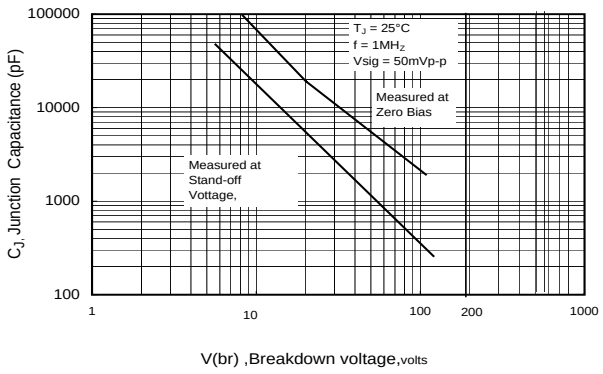
Parameter	12 V system	24 V system
U_s	65 V to 87 V	123 V to 174 V
R_i	0,5 Ω to 4 Ω	1 Ω to 8 Ω
t_d	40 ms to 400 ms	100 ms to 350 ms
t_r	$\left(10\ ^{0}_{-5}\right)$ ms	

Soldering Parameters

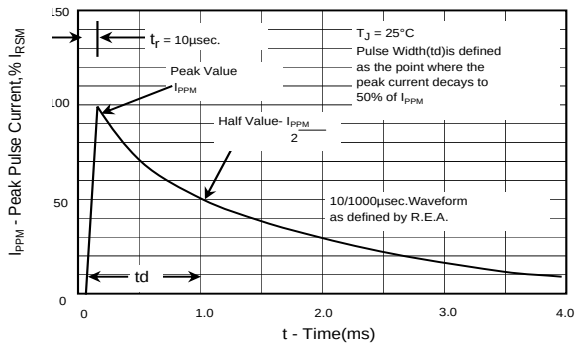
Peak Pulse Power Rating Curve



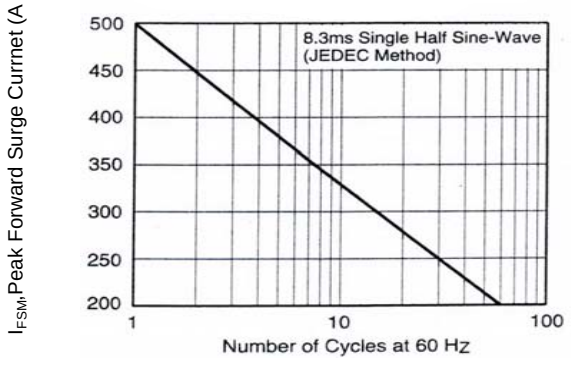
Typical Junction Capacitance



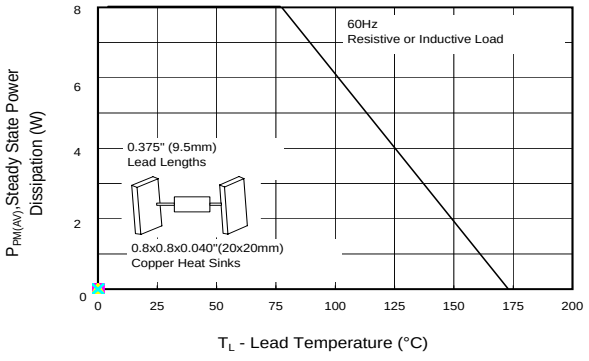
Pulse Waveform



Maximum Non-repetitive Forward Surge



Power Derating Curve



Pulse Derating Curve