

# 5KP30CAS - 58CAS

# BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

**V<sub>RM</sub> : 30 - 58 Volts**

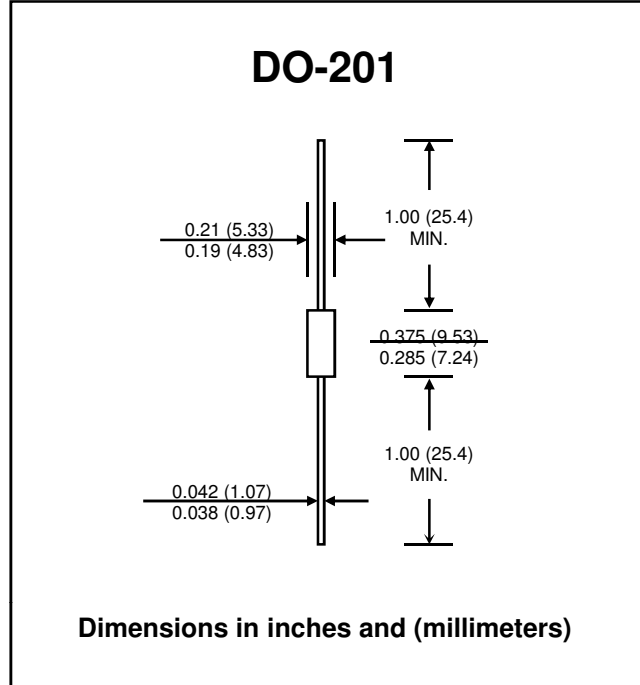
**P<sub>PK</sub> : 5000 Watts**

**FEATURES :**

- \* 5000W Peak Pulse Power
- \* Excellent clamping capability
- \* Low incremental surge resistance
- \* Fast response time : typically less than 1.0 ps from 0 volt to V<sub>BR(min.)</sub>
- \* Pb / RoHS Free

**MECHANICAL DATA**

- \* Case : DO-201 Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- \* Mounting position : Any
- \* Weight : 0.93 grams



**MAXIMUM RATINGS** ( Rating at 25 °C ambient temperature unless otherwise specified.)

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation at tp = 1ms (Note 1, Fig. 4)	P <sub>PK</sub>	Minimum 5000	W
Steady State Power Dissipation at T <sub>L</sub> = 75 °C Lead Lengths 0.375", (9.5mm) (Note 2)	P <sub>D</sub>	8.0	W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150	°C

**Notes :**

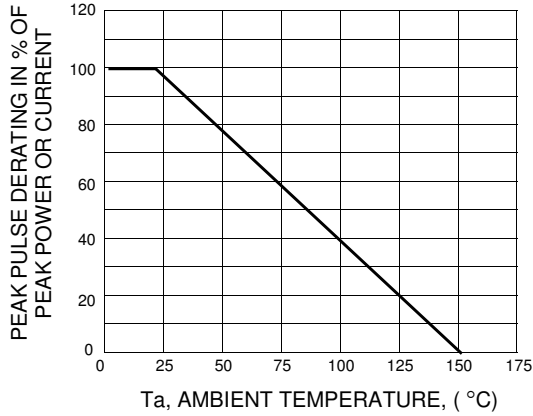
- (1) Non-repetitive Current pulse, per Fig. 2 and derated above Ta = 25 °C per Fig. 1
- (2) Mounted on Copper Leaf area of 0.79 in<sup>2</sup> (20mm<sup>2</sup>).

**ELECTRICAL CHARACTERISTICS** (Rating at 25 °C ambient temperature unless otherwise specified)

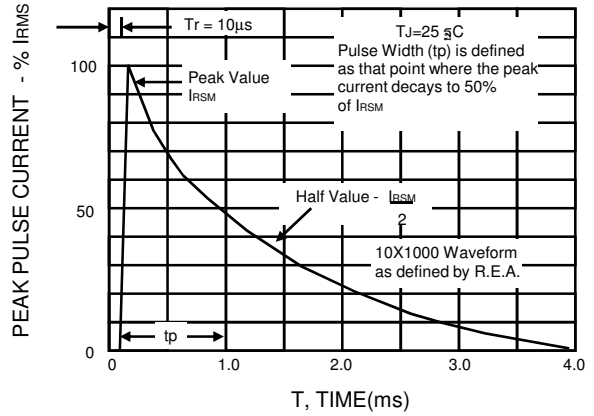
Type	Breakdown Voltage @ I <sub>T</sub>		Reverse Stand off Voltage V <sub>RM</sub> (V)	Maximum Reverse Leakage @ V <sub>RM</sub> I <sub>R</sub> (μA)	Maximum Peak Pulse Current I <sub>PPM</sub> (A)	Maximum Clamping Voltage @ I <sub>PPM</sub> V <sub>C</sub> (V)	Maximum Temperature Coefficient of V <sub>BR</sub> (%/°C)
	V <sub>BR</sub> (V)						
	Min.	Max.					
5KP30CAS	33.3	36.8	5.0	30	108	48.4	0.103
5KP36CAS	40.0	44.2	5.0	36	90	58.1	0.104
5KP48CAS	53.3	58.9	5.0	48	67	77.4	0.106
5KP58CAS	64.4	71.2	5.0	58	55	94	0.107

**RATING AND CHARACTERISTIC CURVES ( 5KP30CAS - 58CAS )**

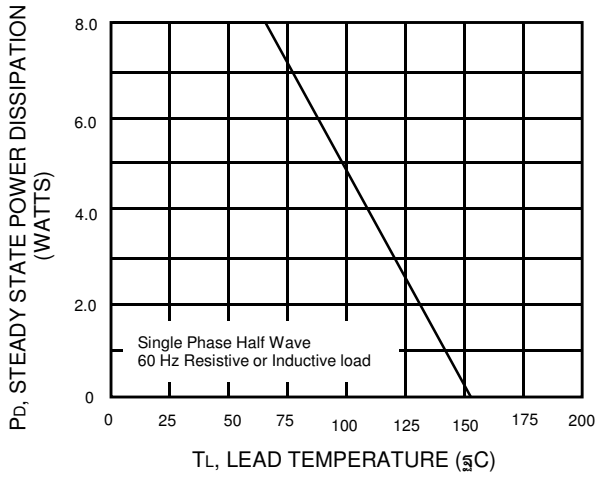
**FIG.1 - PULSE DERATING CURVE**



**FIG.2 - PULSE WAVEFORM**



**FIG.3 - STEADY STATE POWER DERATING**



**FIG.4 - PULSE RATING CURVE**

