

5KP30CAS - 58CAS

BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

V_{RM} : 30 - 58 Volts

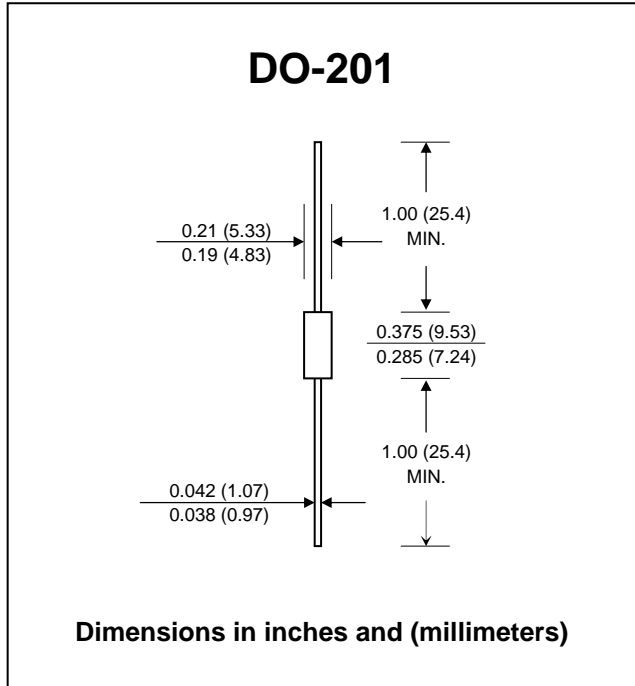
P_{PK} : 5000 Watts

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_{BR(min.)}
- * 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 _{PK}	Minimum 5000	W
Steady State Power Dissipation at T _L = 75 °C Lead Lengths 0.375", (9.5mm) (Note 2)	P _D	8.0	W
Operating and Storage Temperature Range	T _J , T _{STG}	- 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 in² (20mm²).

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

Type	Breakdown Voltage @ I _T		Reverse Stand off Voltage	Maximum Reverse Leakage @ V _{RM}	Maximum Peak Pulse Current	Maximum Clamping Voltage @ I _{PPM}	Maximum Temperature Coefficient of V _{BR}	
	V _{BR} (V)	I _T						V _{RM}
	Min.	Max.	(mA)	(V)	(μA)	(A)	(V)	(%/°C)
5KP30CAS	33.3	36.8	5.0	30	10	103	48.4	0.103
5KP36CAS	40.0	44.2	5.0	36	10	86	58.1	0.104
5KP48CAS	53.3	58.9	5.0	48	10	65	77.4	0.106
5KP58CAS	64.4	71.2	5.0	58	10	53	94	0.107

RATING AND CHARACTERISTIC CURVES (5KP30CAS - 58CAS)

FIG.1 - PULSE DERATING CURVE

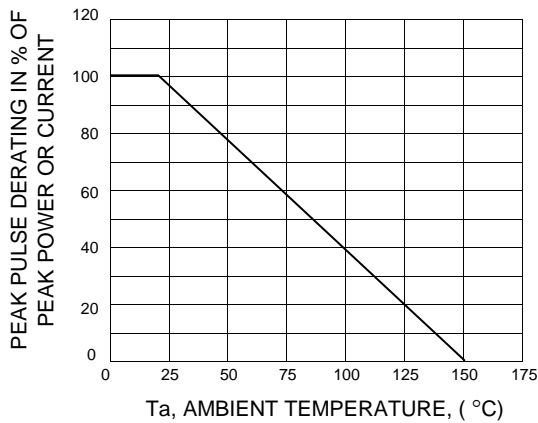


FIG.2 - PULSE WAVEFORM

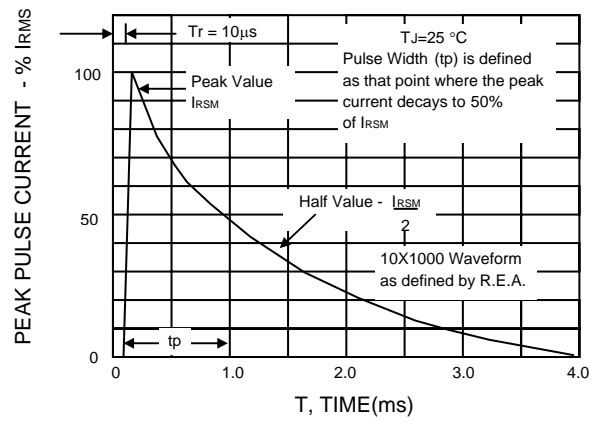


FIG.3 - STEADY STATE POWER DERATING

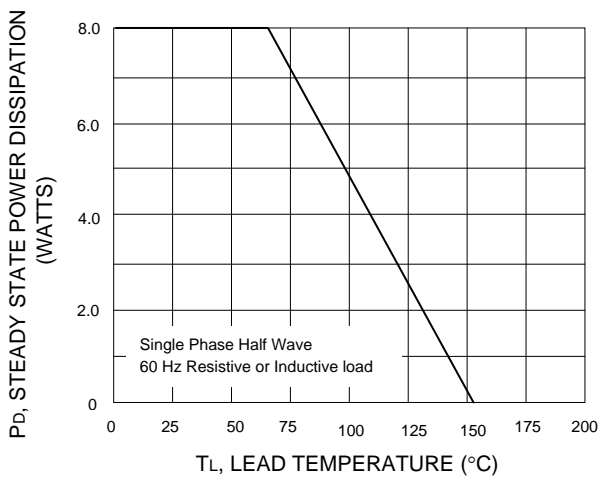


FIG.4 - PULSE RATING CURVE

