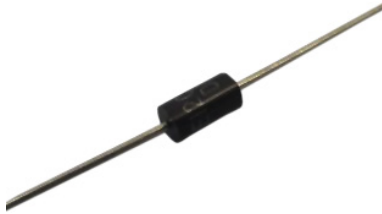


Transient Voltage Suppressor multicomp^{PRO}



Features:

- Low leakage
- Uni and Bi-Directional unit
- Excellent clamping capability
- Plastic material has UL recognition 94V-0
- Fast response time

Mechanical Data:

Case	: Molded Plastic
Polarity	: Colour band denotes cathode except in Bi-Directional
Weight	: 0.4 grams
Reverse Voltage	: 6.8 to 600 Volts
Power Dissipation	: 600 Watts

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Characteristics	Symbol	Values	Unit
Peak Power Dissipation at $T_A = 25^\circ\text{C}$ TP = 1ms (Note 1)	P_{PK}	Min. 600	Watts
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	100	Amps
Steady State Power Dissipation at $T_L = 75^\circ\text{C}$ Lead Lengths 0.375"(9.5mm)	$P_{M(AV)}$	5	Watts
Maximum Instantaneous Forward Voltage at 50A for Uni-Directional Devices only (Note 2)	V_F	See Note 3	Volts
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +175	$^\circ\text{C}$

Notes:

1. Non-repetitive current pulse, per Fig. 5 and derated above $T_A = 25^\circ\text{C}$ per Fig. 1.
2. 8.3ms single half-wave duty cycle=4 pulses per minutes maximum (uni-directional units only).
3. $V_F = 3.5\text{V}$ on P6KE6.8 thru P6KE200A devices.

Part Number		Reverse Standoff Voltage	Breakdown Voltage BV Volts@It			Max. Reverse Leakage	Max. Clamping Voltage	Max. Peak Pulse	Max. Voltage Temp. Variation
(UNI)	(BI)	VR(V)	Min.(V)	Max.(V)	It(mA)	IR(μA)	Vc(V)	Ipp(A)	mV/ $^\circ\text{C}$
-	P6KE12CA+	10.2	11.4	12.6	1	5	16.7	36	0.078
P6KE13A+	-	11.1	12.4	13.7	1	5	18.2	33	0.081
P6KE150A+	-	128	143	158	1	5	207	2.9	0.108

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicomp^{PRO}

Transient Voltage Suppressor **multicomp**PRO

Part Number		Reverse Standoff Voltage	Breakdown Voltage BV Volts@It			Max. Reverse Leakage	Max. Clamping Voltage	Max. Peak Pulse	Max. Voltage Temp. Variation
(UNI)	(BI)	VR(V)	Min.(V)	Max.(V)	It(mA)	IR(μA)	Vc(V)	Ipp(A)	mV/°C
-	P6KE15CA+	12.8	14.3	15.8	1	5	21.2	28	0.084
P6KE16A+	P6KE16CA+	13.6	15.2	16.8	1	5	22.5	27	0.086
P6KE180A+	P6KE180CA+	154	171	189	1	5	246	2.4	0.108
P6KE18A+	P6KE18CA+	15.3	17.1	18.9	1	5	25.2	24	0.088
P6KE20A+	-	17.1	19	21	1	5	27.7	22	0.09
P6KE22A+	-	18.8	20.9	23.1	1	5	30.6	20	0.092
-	P6KE24CA+	20.5	22.8	25.2	1	5	33.2	18	0.094
P6KE30A+	P6KE30CA+	25.6	28.5	31.5	1	5	41.4	14.4	0.097
P6KE33A+	-	28.2	31.4	34.7	1	5	45.7	13.2	0.098
-	P6KE36CA+	30.8	34.2	37.8	1	5	49.9	12	0.099
P6KE39A+	P6KE39CA+	33.3	37.1	41	1	5	53.9	11.2	0.1
P6KE62A+	-	53	58.9	65.1	1	5	85	7.1	0.104
P6KE7.5A+	-	6.4	7.13	7.88	10	500	11.3	53	0.061
-	P6KE8.2CA+	7.02	7.79	8.61	10	200	12.1	50	0.065
-	P6KE9.1CA+	7.78	8.65	9.55	1	50	13.4	45	0.068
-	P6KE200CA+	171	190	210	1	5	274	2.2	0.108

Notes: Suffix 'C' denotes bidirectional device . Suffix 'A' denotes 5% tolerance device .no suffix denotes 10% tolerance device
1. For bidirectional devices having VR of 10Volts and under ,the IR limit is doubled

Ratings and Characteristic Curves

FIG.1-PULSE DERATING CURVE

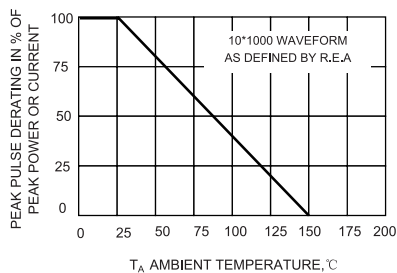


FIG.2-TYPICAL JUNCTION CAPACITANCE

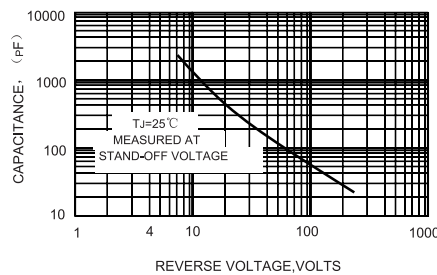


FIG.3-PULSE RATING CURVE

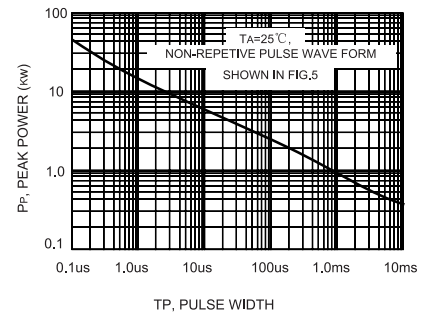


FIG.4-STEADY STATE POWER DERATING CURVE

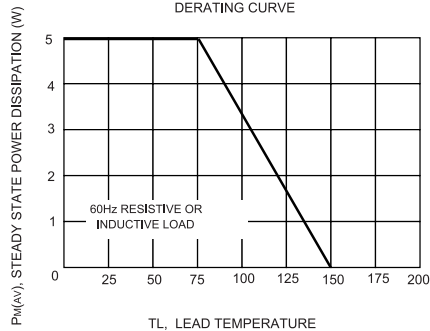
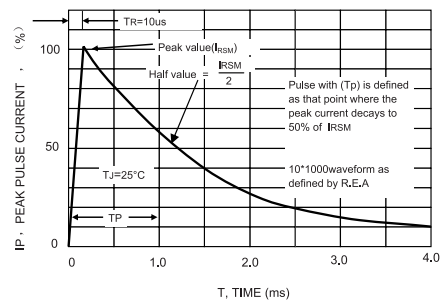


FIG.5-PULSE WAVEFORM

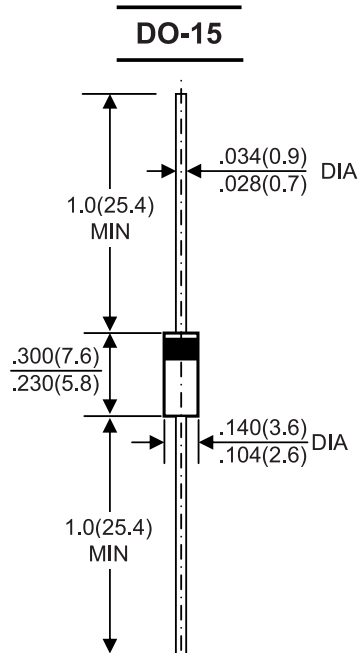


Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicompPRO

Transient Voltage Suppressor **multicomp**PRO

Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Unidirectional And Bidirectional Transient Voltage Suppressors	P6KE12CA+
	P6KE13A+
	P6KE150A+
	P6KE15CA+
	P6KE16A+
	P6KE16CA+
	P6KE180A+
	P6KE180CA+
	P6KE18A+
	P6KE18CA+
	P6KE200CA+
	P6KE20A+

Description	Part Number
Unidirectional And Bidirectional Transient Voltage Suppressors	P6KE22A+
	P6KE24CA+
	P6KE30A+
	P6KE30CA+
	P6KE33A+
	P6KE36CA+
	P6KE39A+
	P6KE39CA+
	P6KE62A+
	P6KE7.5A+
	P6KE8.2CA+
	P6KE9.1CA+

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicompPRO