

TRANSIENT VOLTAGE SUPPRESSORS

FEATURE

- ✧ Plastic package.
- ✧ Glass passivated junction.
- ✧ 15000W Peak Pulse Power capability on 10/1000 μ s waveform.
- ✧ Excellent clamping capability.
- ✧ Repetition rate (duty cycle):0.05%.
- ✧ Low incremental surge resistance.
- ✧ Fast response time: typically less than 1.0ps from 0 Volts to BV, Bidirectional less than 10ns.
- ✧ High temperature soldering guaranteed: 265 $^{\circ}$ C/10 seconds/.375", (9.5mm) lead length, 5lbs., (2.3kg) tension.



P600

MECHANICAL DATE

- ✧ Case: Molded plastic over glass passivated junction.
- ✧ Terminals: Plated Axial leads, solderable per MIL-STD-750, Method 2026.
- ✧ Polarity: Color band denotes positive end (cathode) except Bipolar.
- ✧ Mounting Position: Any.
- ✧ Weight: 0.07 ounce, 2.5grams.

DEVICES FOR BIPOLAR APPLICATION

For bidirectional use C or CA suffix for types 15KPA17 thru types 15KPA280 (e.g. 15KPA17C, 15KPA280CA), electrical characteristics apply in both directions.

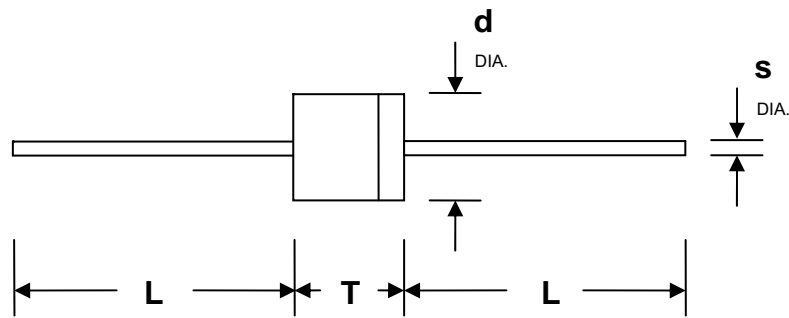
MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 $^{\circ}$ C ambient temperature unless otherwise specified

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000 μ s waveform (Note1, Fig.1).	P _{PPM}	Minimum 15000	Watts
Peak Pulse Current of on 10/1000 μ s waveform.(Note1, Fig.3)	I _{PPM}	See Table	Amps
Steady State Power Dissipation at T _L =75 $^{\circ}$ C,Lead lengths.375", (9.5mm) (Fig.5).	P _{M(AV)}	8	Watts
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load, (JEDEC Method) (Note 2, Fig.6).	I _{FSM}	400	Amps
Operating junction and Storage Temperature Range.	T _J , T _{STG}	-55 to +175	$^{\circ}$ C

Notes: 1. Non-repetitive current pulse, per Fig. 3 and derated above T_A = 25 $^{\circ}$ C per Fig. 2.

2. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.

DIMENSIONS

P600

Item	Millimeters		Inches	
	Min.	Max.	Min.	Max.
L	25.40	-	1.000	-
T	8.60	9.10	0.340	0.360
d	8.60	9.10	0.340	0.360
s	1.22	1.32	0.048	0.052

ELECTRICAL CHARACTERISTICS

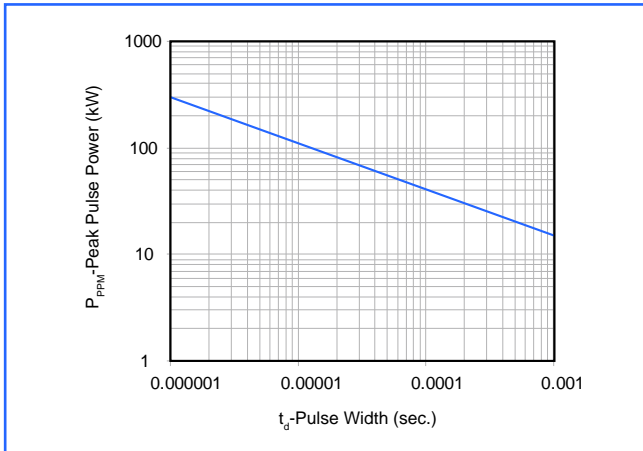
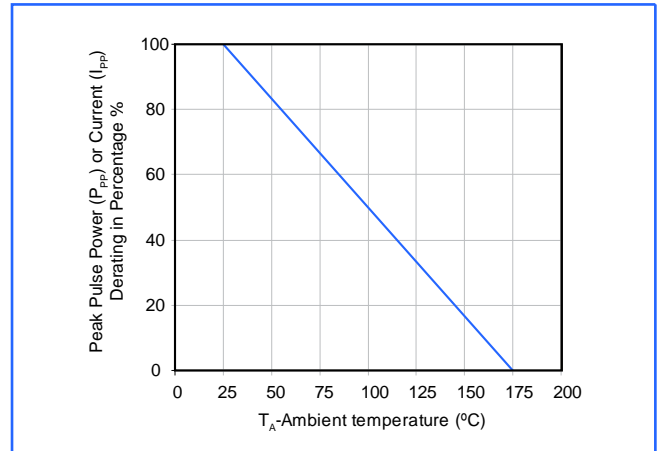
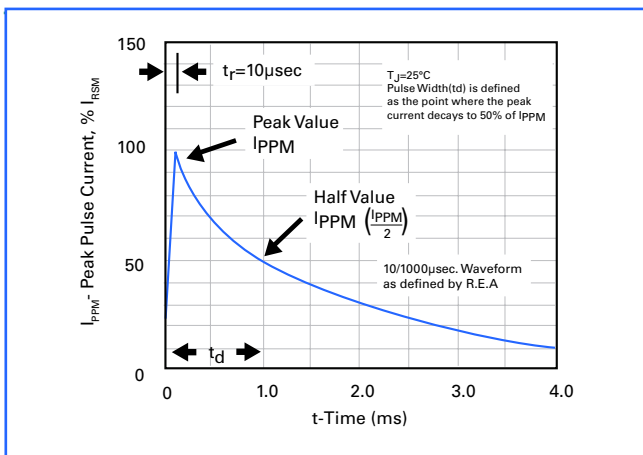
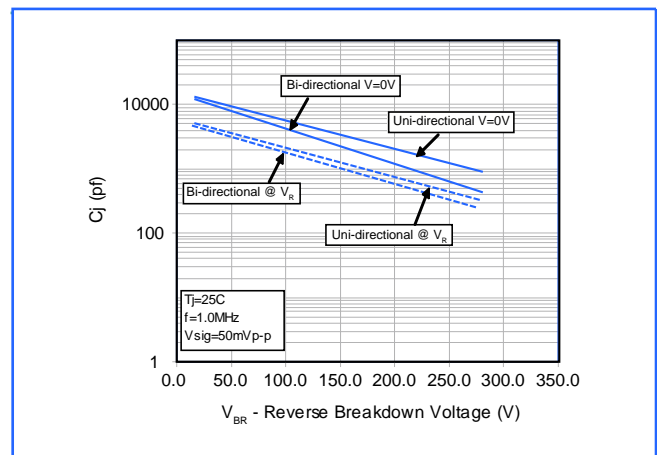
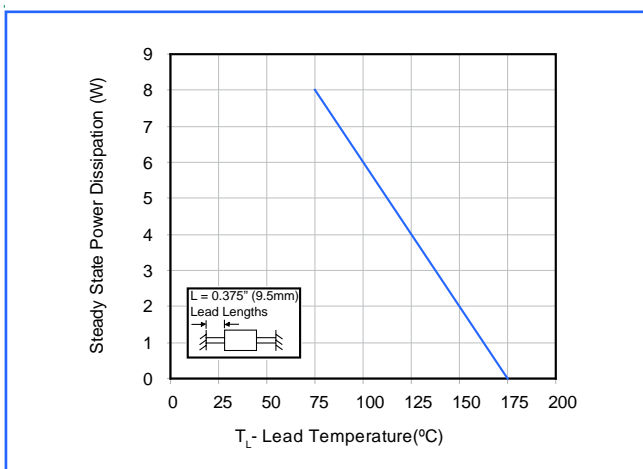
Part Number		Reverse Stand-Off Voltage	Breakdown Voltage NIN. @ I_T	Test Current	Maximum Clamping Voltage @ I_{PP}	Peak Pulse Current	Reverse Leakage @ V_{RWM}
UNT-POLAR	BI-POLAR	$V_{RWM}(V)$	$V_{BR MIN.}(V)$	$I_T(mA)$	$V_C(V)$	$I_{PP}(A)$	$I_R(\mu A)$
15KP17A	15KP17CA	17.0	18.99	50	29.3	515.4	5000
15KP18A	15KP18CA	18.0	20.11	50	30.9	488.7	5000
15KP20A	15KP20CA	20.0	22.34	20	34.3	440.2	1500
15KP22A	15KP22CA	22.0	24.57	10	37.1	407.0	500
15KP24A	15KP24CA	24.0	26.81	5	40.7	371.0	150
15KP26A	15KP26CA	26.0	29.04	5	44.0	343.2	50
15KP28A	15KP28CA	28.0	31.28	5	47.5	317.9	25
15KP30A	15KP30CA	30.0	33.51	5	50.7	297.8	15
15KP33A	15KP33CA	33.0	36.90	5	54.7	276.1	2
15KP36A	15KP36CA	36.0	40.20	5	59.8	252.5	2
15KP40A	15KP40CA	40.0	44.70	5	65.8	229.5	2

ELECTRICAL CHARACTERISTICS

Part Number		Reverse Stand-Off Voltage	Breakdown Voltage NIN. @I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
UNT-POLAR	BI-POLAR	V _{RWM} (V)	V _{BR MIN.} (V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (μA)
15KP43A	15KP43CA	43.0	48.00	5	69.8	216.3	2
15KP45A	15KP45CA	45.0	50.30	5	72.8	207.4	2
15KP48A	15KP48CA	48.0	53.60	5	77.7	194.3	2
15KP51A	15KP51CA	51.0	57.00	5	82.9	182.1	2
15KP54A	15KP54CA	54.0	60.30	5	87.7	172.2	2
15KP58A	15KP58CA	58.0	64.80	5	93.8	161.0	2
15KP60A	15KP60CA	60.0	67.00	5	97.4	155.0	2
15KP64A	15KP64CA	64.0	71.50	5	104.2	144.9	2
15KP70A	15KP70CA	70.0	78.20	5	113.6	132.9	2
15KP75A	15KP75CA	75.0	83.80	5	122.0	123.8	2
15KP78A	15KP78CA	78.0	87.10	5	126.1	119.7	2
15KP85A	15KP85CA	85.0	94.90	5	137.6	109.7	2
15KP90A	15KP90CA	90.0	100.50	5	145.6	103.7	2
15KP100A	15KP100CA	100.0	111.70	5	161.3	93.6	2
15KP110A	15KP110CA	110.0	122.90	5	178.6	84.5	2
15KP120A	15KP120CA	120.0	134.00	5	192.3	78.5	2
15KP130A	15KP130CA	130.0	145.20	5	208.3	72.5	2
15KP150A	15KP150CA	150.0	167.60	5	241.9	62.4	2
15KP160A	15KP160CA	160.0	178.70	5	258.6	58.4	2
15KP170A	15KP170CA	170.0	189.90	5	272.7	55.4	2
15KP180A	15KP180CA	180.0	201.10	5	288.5	52.3	2
15KP200A	15KP200CA	200.0	223.40	5	319.1	47.3	2
15KP220A	15KP220CA	220.0	245.70	5	352.5	42.8	2
15KP240A	15KP240CA	240.0	268.10	5	384.6	39.3	2
15KP260A	15KP260CA	260.0	290.40	5	416.7	36.2	2
15KP280A	15KP280CA	280.0	312.80	5	454.5	33.2	2

Notes: For bidirectional type having V_{RWM} of 30 volts and less, the I_R limit is double.

RATINGS AND CHARACTERISTIC CURVES (TA=25°C unless otherwise noted)

Figure 1 - Peak Pulse Power Rating Curve

Figure 2 - Pulse Derating Curve

Figure 3 - Pulse Waveform

Figure 4 - Typical Junction Capacitance

Figure 5 - Steady State Power Dissipation Derating Curve

Figure 6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Only
