WEITRON

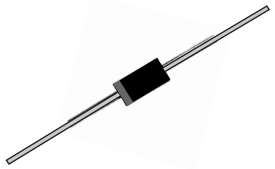
P6KE 6.8(C)A thru P6KE 440(C)A

600W Transient Voltage Suppressors

Peak Pulse Power
600 Watt
Stand-off Voltage
6.8 To 440 VOLTS

Feature:

* 600 Watt Peak Power Dissipation
* Glass Passivated Die Construction
* Excellent Clamping Capability Fast Response Time
* High Temperat Soldering Guaranteed : 265°C/10 sec/.375" (9.5mm) Lead Length, 51bs., (2.3kg) Tension.



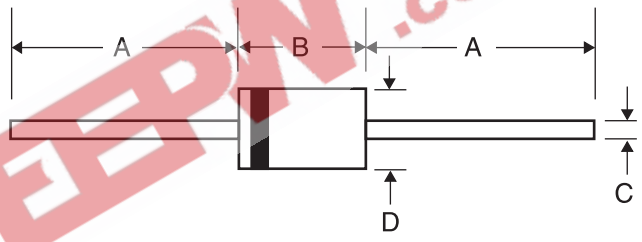
DO-15
(DO-204AC)

Mechanical Data

* Case: JEDEC DO-15 molded Plastic.
* Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
* Polarity: Color Band Denotes Cathode Except Bipolar
* Mounting Position: Any
* Weight: 0.4grams(approx), 0.015ounce.

DO-15 Outline Dimensions

Axial Device



	A		B		C		D	
Dim	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
DO-15	**25.4**	**-**	**5.8**	**7.6**	**0.71**	**0.86**	**2.6**	**3.6**

Maximum Ratings (T_A=25°C Unless otherwise Noted)

Characteristics	Symbol	Value	Unit
Peak Pulse Power Dissipation at T_A =25°C, tp=1.0 ms (1)	P_{PPM}	600	W
Steady State Power Dissipation at TL=75°C Lead Lengths .375"(9.5mm) (1)	$P_{M(AV)}$	5	W
Peak Forward Surge Current 8.3ms Single Half Sine-Wave, Superimposed on Rated Load(JEDEC Method)(3)	I_{FSM}	100	A
Operating and Storage Junction Temperature Range	Tj, T STG	-55 to -175	°C

NOTE: 1. Non-Repetitive Current Pulse, per Fig3 and Derated above TA=25°C per Fig2
2. Mounted on Copper Pads Area of 1.6 ×1.6"(40 × 40mm) per FIG.5.
3. 8.3ms Single Half Sine-Wave, or equivalent Square Wave, Duty Cycle=4 pulses per minutes Maximum.

Electrical Characteristics

P6KE PART NUMBER		REVERSE STAND-OFF VOLTAGE V_{RWM}(V)	BREAKDOWN VOLTAGE V_{BR}(V) MIN.@I_T	BREAKDOWN VOLTAGE V_{BR}(V) MAX.@I_T	TEST CURRENT I_T (mA)	MAXIMUM CLAMPING VOLTAGE @Ipp Vc(V)	PEAK PULSE CURRENT Ipp(A)	REVERSE LEAKAGE @V_{RWM} I_R(μA)
UNI-POLAR	BI-POLAR							
P6KE6.8A	P6KE6.8CA	5.80	6.45	7.14	10	10.5	58.1	1000
P6KE7.5A	P6KE7.5CA	6.40	7.13	7.88	10	11.3	54.0	500
P6KE8.2A	P6KE8.2CA	7.02	7.79	8.61	10	12.1	50.4	200
P6KE9.1A	P6KE9.1CA	7.78	8.65	9.55	1	13.4	45.5	50
P6KE10A	P6KE10CA	8.55	9.50	10.50	1	14.5	42.1	10
P6KE11A	P6KE11CA	9.40	10.50	11.60	1	15.6	39.1	5
P6KE12A	P6KE12CA	10.20	11.40	12.60	1	16.7	36.5	5
P6KE13A	P6KE13CA	11.10	12.40	13.70	1	18.2	33.5	5
P6KE15A	P6KE15CA	12.80	14.30	15.80	1	21.2	28.8	5
P6KE16A	P6KE16CA	13.60	15.20	16.80	1	22.5	27.1	5
P6KE18A	P6KE18CA	15.30	17.10	18.90	1	25.2	24.2	5
P6KE20A	P6KE20CA	17.10	19.00	21.00	1	27.7	22.0	5
P6KE22A	P6KE22CA	18.80	20.90	23.10	1	30.6	19.9	5
P6KE24A	P6KE24CA	20.50	22.80	25.20	1	33.2	18.4	5
P6KE27A	P6KE27CA	23.10	25.70	28.40	1	37.5	16.3	5
P6KE30A	P6KE30CA	25.60	28.50	31.50	1	41.4	14.7	5
P6KE33A	P6KE33CA	28.20	31.40	34.70	1	45.7	13.3	5
P6KE36A	P6KE36CA	30.80	34.20	37.80	1	49.9	12.2	5
P6KE39A	P6KE39CA	33.30	37.10	41.00	1	53.9	11.3	5
P6KE43A	P6KE43CA	36.80	40.90	45.20	1	59.3	10.3	5
P6KE47A	P6KE47CA	40.20	44.70	49.40	1	64.8	9.4	5
P6KE51A	P6KE51CA	43.60	48.50	53.60	1	70.1	8.7	5
P6KE56A	P6KE56CA	47.80	53.20	58.80	1	77.0	7.9	5
P6KE62A	P6KE62CA	53.00	58.90	65.10	1	85.0	7.2	5
P6KE68A	P6KE68CA	58.10	64.60	71.40	1	92.0	6.6	5
P6KE75A	P6KE75CA	64.10	71.30	78.80	1	103.0	5.9	5
P6KE82A	P6KE82CA	70.10	77.90	86.10	1	113.0	5.4	5
P6KE91A	P6KE91CA	77.80	86.50	95.50	1	125.0	4.9	5
P6KE100A	P6KE100CA	85.50	95.00	105.00	1	137.0	4.5	5
P6KE110A	P6KE110CA	94.00	105.00	116.00	1	152.0	4.0	5
P6KE120A	P6KE120CA	102.00	114.00	126.00	1	165.0	3.7	5
P6KE130A	P6KE130CA	111.00	124.00	137.00	1	179.0	3.4	5
P6KE150A	P6KE150CA	128.00	143.00	158.00	1	207.0	2.9	5
P6KE160A	P6KE160CA	136.00	152.00	168.00	1	219.0	2.8	5
P6KE170A	P6KE170CA	145.00	162.00	179.00	1	234.0	2.6	5
P6KE180A	P6KE180CA	154.00	171.00	189.00	1	246.0	2.5	5
P6KE200A	P6KE200CA	171.00	190.00	210.00	1	274.0	2.2	5
P6KE220A	P6KE220CA	185.00	209.00	231.00	1	328.0	1.9	5
P6KE250A	P6KE250CA	214.00	237.00	263.00	1	344.0	1.8	5
P6KE300A	P6KE300CA	256.00	285.00	315.00	1	414.0	1.5	5
P6KE350A	P6KE350CA	300.00	332.00	368.00	1	482.0	1.3	5
P6KE400A	P6KE400CA	342.00	380.00	420.00	1	548.0	1.1	5
P6KE440A	P6KE440CA	376.00	418.00	462.00	1	602.0	1.0	5

For bidirectional type having Vrwm of 10 volts and less, the IR limit is double.
For parts without A , the V_{BR} is ± 10%

FIG.1- PEAK PULSE POWER RATING CURVE

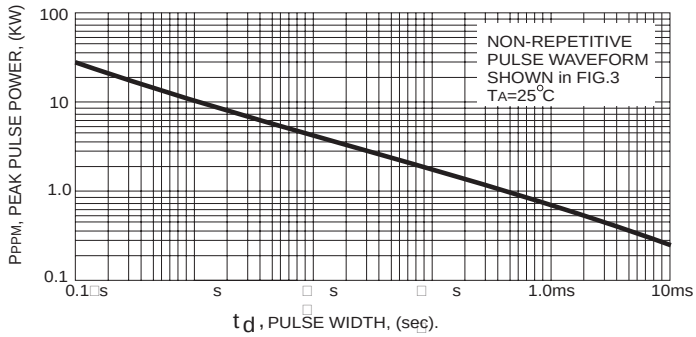


FIG.2- PULSE DERATING CURVE

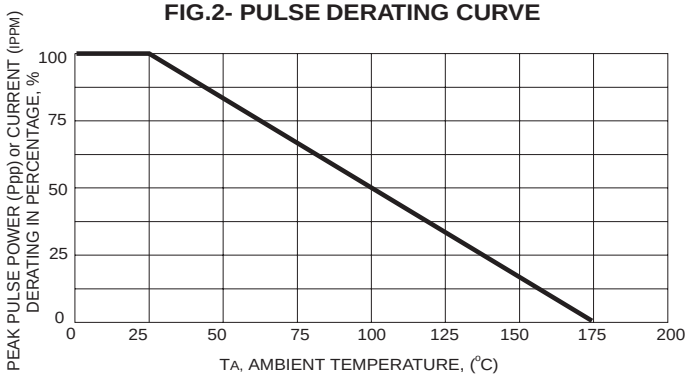


FIG.3- PULSE WAVEFORM

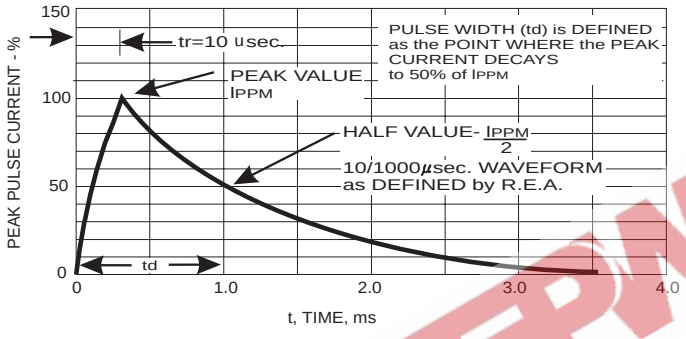


FIG.4- TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL

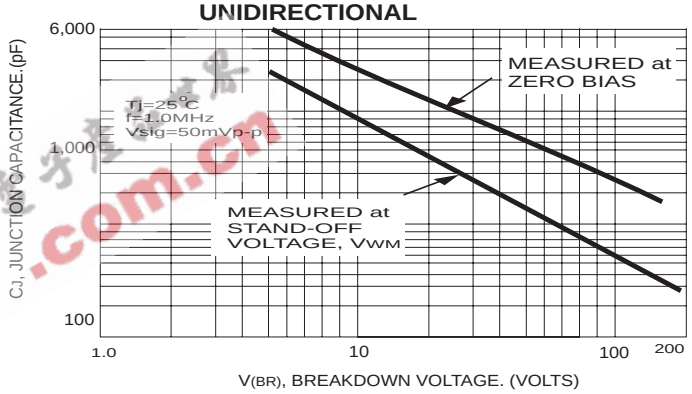


FIG.5- STEADY STATE POWER DERATING CURVE

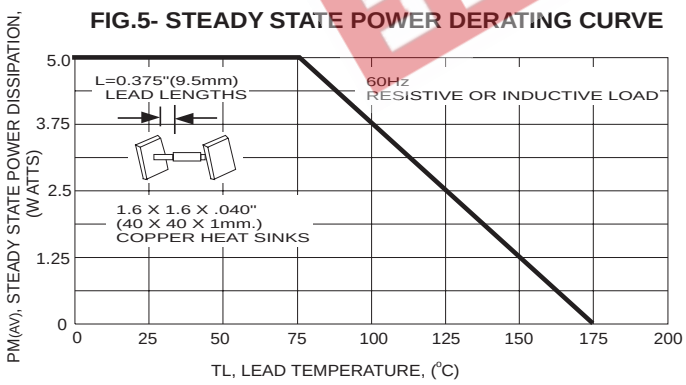


FIG.6- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT UNIDIRECTIONAL ONLY

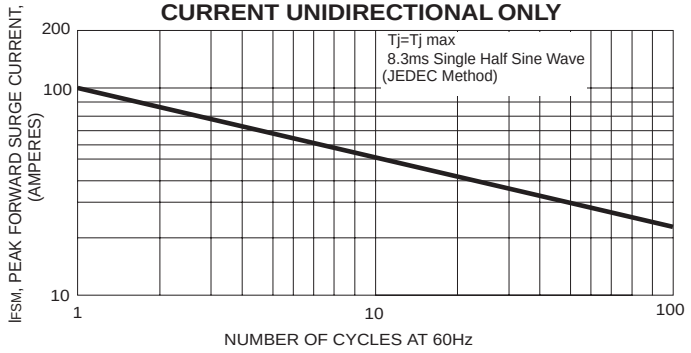


FIG.7- TYPICAL REVERSE LEAKAGE CHARACTERASTICS

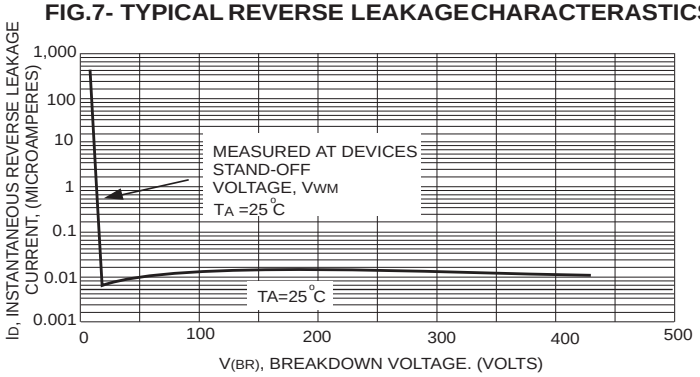


FIG.8 - TYP. TRANSIENT THERMAL IMPEDANCE