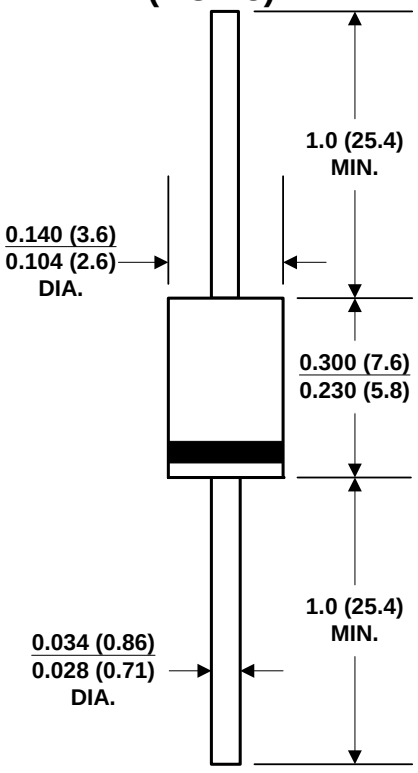
VOLTAGE - 6.8 to 600 Volts
600 Watt Peak Power / 5.0 Watt Steady State

DO-204AC
(DO-15)



Dimensions in inches and(millimeters)

FEATURES

◎ Plastic package
◎ Glass passivated chip junction in DO-15 Package
◎ 600W surge capability at 10/1000 μs wave form
◎ Excellent clamping capability
◎ Low zener impedance
◎ Fast response time: typically less than 1.0ps from 0 Volts to BV min.
◎ Typical IR less than 1μA above 10V
◎ High temperature soldering guaranteed: 265°C/10 seconds/.375", (9.5mm) lead length, 5lbs., (2.3kg) tension
◎ Pb-free plated

MECHANICAL DATA

Case: JEDEC DO-15 Molded Plastic
Terminal: Solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode except Bipolar
Mounting Position: Any
Weight: 0.015 ounce, 0.4 grams

DEVICES FOR BIPOLAR APPLICATION

For Bidirectional use C or CA Suffix for types P6KE 6.8 thru types P6KE600 (e.g. P6KE6.8C , P6KE600CA)
Electrical characteristics apply in both directions

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation at T_A = 25℃ , T_P = 1ms (Note 1)	P_{PPM}	Minimum 600	Watts
Steady State Power Dissipation at T_L = 75℃ ,Lead lengths.375",(9.5mm) (Note 2)	$P_{M(AV)}$	5	Watts
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load,(JEDEC Method) (Note 3)	I_{FSM}	100	Amps
Operating junction and Storage Temperature Range	T_J , T_{STG}	-55 to + 175	℃

Notes :
1.Non-repetitive current pulse , per Fig. 3 and derated above T_A = 25℃ per Fig. 2 .
2.Mounted on Copper Pad 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.

VOLTAGE - 6.8 to 600 Volts
600 Watt Peak Power / 5.0 Watt Steady State

"＊"标注为常用型号
"＊"*Stand for commonly used models*

P6KE PART NUMBER		REVERSE STAND-OFF VOLTAGE	BREAKDOWN VOLTAGE	BREAKDOWN VOLTAGE	TEST CURRENT	MAXIMUM CLAMPING VOLTAGE	PEAK PULSE CURRENT	REVERSE LEAKAGE @V_{RWM}
UNI-POLAR	BI-POLAR	V_{RWM}(V)	V_{BR}(V) MIN.@I_T	V_{BR}(V) MAX.@I_T	I_T (mA)	@Ipp Vc(V)	Ipp(A)	I_R(μA)
＊P6KE6.8A	＊P6KE6.8CA	5.80	6.45	7.14	10	10.5	58.1	600
P6KE7.5A	P6KE7.5CA	6.40	7.13	7.88	10	11.3	54.0	400
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	1
P6KE15A	＊P6KE15CA	12.80	14.30	15.80	1	21.2	28.8	1
P6KE16A	P6KE16CA	13.60	15.20	16.80	1	22.5	27.1	1
P6KE18A	P6KE18CA	15.30	17.10	18.90	1	25.2	24.2	1
＊P6KE20A	P6KE20CA	17.10	19.00	21.00	1	27.7	22.0	1
P6KE22A	＊P6KE22CA	18.80	20.90	23.10	1	30.6	19.9	1
＊P6KE24A	＊P6KE24CA	20.50	22.80	25.20	1	33.2	18.4	1
P6KE27A	P6KE27CA	23.10	25.70	28.40	1	37.5	16.3	1
P6KE30A	＊P6KE30CA	25.60	28.50	31.50	1	41.4	14.7	1
＊P6KE33A	P6KE33CA	28.20	31.40	34.70	1	45.7	13.3	1
＊P6KE36A	P6KE36CA	30.80	34.20	37.80	1	49.9	12.2	1
P6KE39A	＊P6KE39CA	33.30	37.10	41.00	1	53.9	11.3	1
＊P6KE43A	P6KE43CA	36.80	40.90	45.20	1	59.3	10.3	1
P6KE47A	P6KE47CA	40.20	44.70	49.40	1	64.8	9.4	1
＊P6KE51A	P6KE51CA	43.60	48.50	53.60	1	70.1	8.7	1
P6KE56A	P6KE56CA	47.80	53.20	58.80	1	77.0	7.9	1
P6KE62A	P6KE62CA	53.00	58.90	65.10	1	85.0	7.2	1
P6KE68A	＊P6KE68CA	58.10	64.60	71.40	1	92.0	6.6	1
P6KE75A	＊P6KE75CA	64.10	71.30	78.80	1	103.0	5.9	1
P6KE82A	P6KE82CA	70.10	77.90	86.10	1	113.0	5.4	1
P6KE91A	P6KE91CA	77.80	86.50	95.50	1	125.0	4.9	1
P6KE100A	P6KE100CA	85.50	95.00	105.00	1	137.0	4.5	1
P6KE110A	P6KE110CA	94.00	105.00	116.00	1	152.0	4.0	1
P6KE120A	P6KE120CA	102.00	114.00	126.00	1	165.0	3.7	1
P6KE130A	P6KE130CA	111.00	124.00	137.00	1	179.0	3.4	1
P6KE150A	P6KE150CA	128.00	143.00	158.00	1	207.0	2.9	1
＊P6KE160A	P6KE160CA	136.00	152.00	168.00	1	219.0	2.8	1
P6KE170A	P6KE170CA	145.00	162.00	179.00	1	234.0	2.6	1
＊P6KE180A	P6KE180CA	154.00	171.00	189.00	1	246.0	2.5	1
＊P6KE200A	P6KE200CA	171.00	190.00	210.00	1	274.0	2.2	1
P6KE220A	P6KE220CA	185.00	209.00	231.00	1	328.0	1.9	1
P6KE250A	P6KE250CA	214.00	237.00	263.00	1	344.0	1.8	1
P6KE300A	P6KE300CA	256.00	285.00	315.00	1	414.0	1.5	1
P6KE350A	P6KE350CA	300.00	332.00	368.00	1	482.0	1.3	1
＊P6KE400A	＊P6KE400CA	342.00	380.00	420.00	1	548.0	1.1	1
＊P6KE440A	＊P6KE440CA	376.00	418.00	462.00	1	602.0	1.0	1
P6KE480A	P6KE480CA	408.00	456.00	504.00	1	658.0	0.9	1
P6KE510A	P6KE510CA	434.00	485.00	535.00	1	698.0	0.9	1
P6KE530A	＊P6KE530CA	477.00	503.50	556.50	1	725.0	0.8	1
P6KE540A	P6KE540CA	459.00	513.00	567.00	1	740.0	0.8	1
＊P6KE550A	＊P6KE550CA	495.00	522.50	577.50	1	760.0	0.8	1
P6KE600A	P6KE600CA	512.00	570.00	630.00	1	828.0	0.75	1

For bidirectional type having Vrwm of 10 volts and less, the IR limit is double.
For parts with A , the V_{BR} is ± 5%

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

Pig.1 - Peak Pulse Power Rating Curve

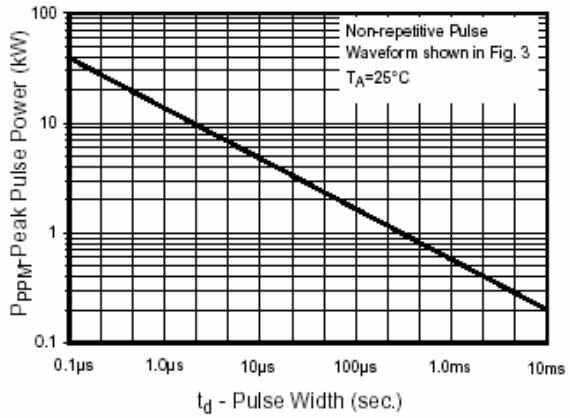


Fig.2 - Pulse Derating Curve

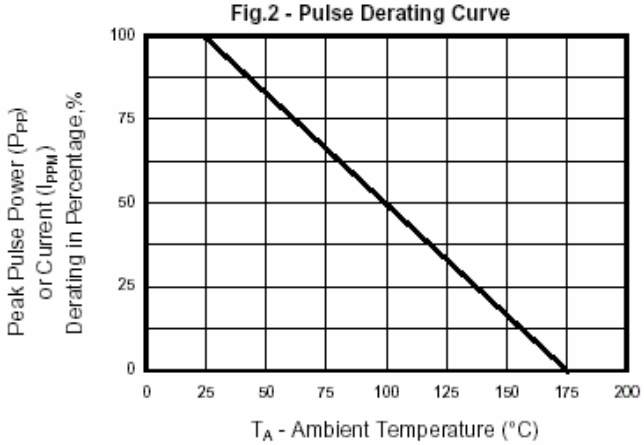


Fig.3 - Pulse Waveform

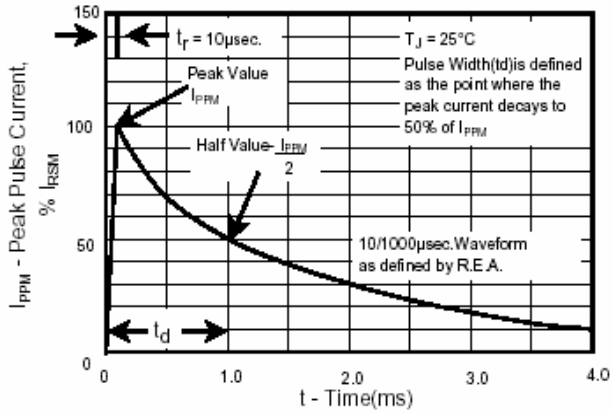


Fig.4 - Typ.Junction Capacitance Uni-Directional

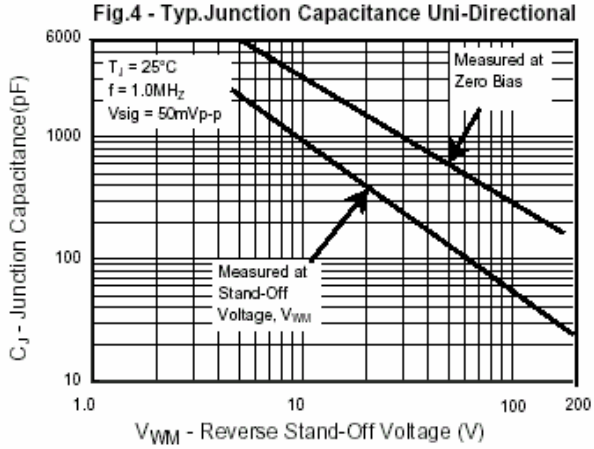


Fig.5 - steady State Power Derating Curve

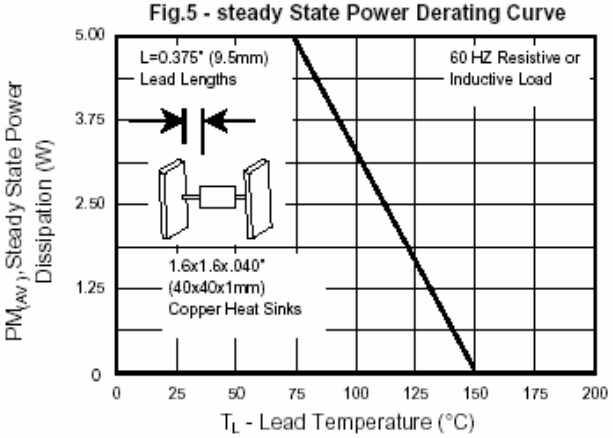


Fig.6 - Max.Non-Repetitive Forward Surge Current

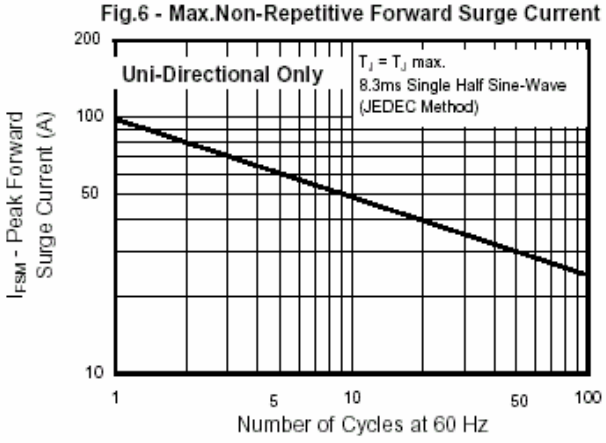


Fig.7 - Typical Reverse Leakage Characteristics

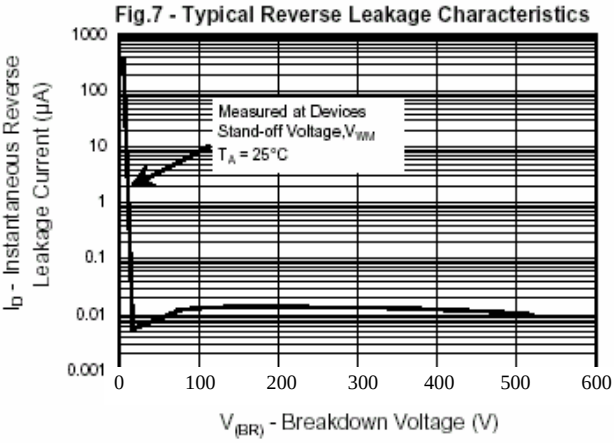


Fig. 8 - Typ.Transient Thermal Impedance