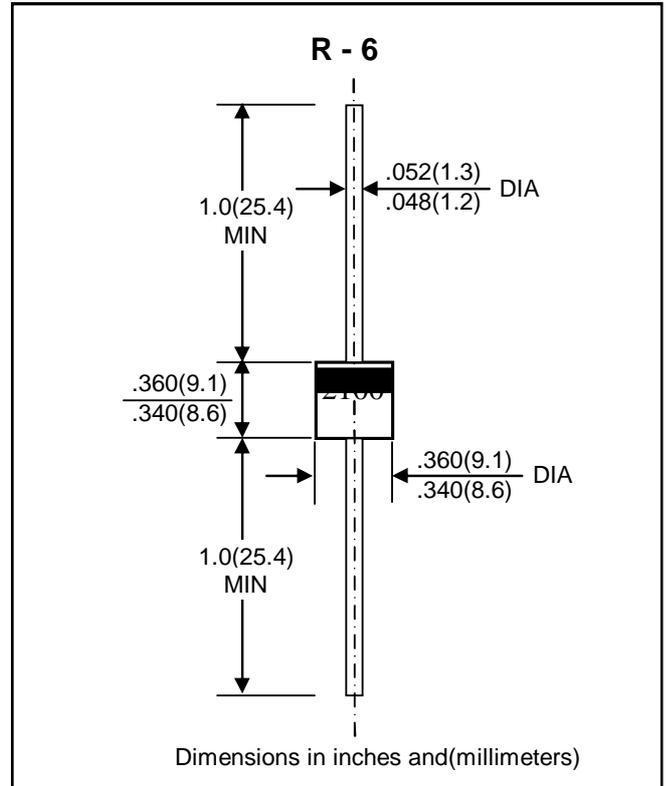


## FEATURES

- Glass passivated chip
- low leakage
- Uni and bidirectional unit
- Excellent clamping capability
- Plastic material has UL recognition 94V-0
- Fast response time

## MECHANICAL DATA

- Case : Molded Plastic
- Marking : Unidirectional -type number and cathode band  
Bidirectional-type number only
- Weight : 0.07ounces, 2.1 grams



## 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	VALUE	UNIT
Peak Power Dissipation at $T_A=25^\circ\text{C}$ TP=1ms (NOTE1)	$P_{PK}$	Minimum 5000	WATTS
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	$I_{FSM}$	400	AMPS
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ Lead Lengths 0.375"(9.5mm), See Fig. 4	$P_{M(AV)}$	8.0	WATTS
Maximum Instantaneous Forward Voltage at 100A for Unidirectional Devices Only (NOTE2)	$V_F$	See NOTE 3	VOLTS
Operating Temperature Range	$T_J$	-55 to + 150	°C
Storage Temperature Range	$T_{STG}$	-55 to + 175	°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 5KP5.0 thru 5KP100A devices and  $V_F=5.0\text{V}$  on 5KP110 thru 5KP180 devices.

Type Number		Reverse Standoff Voltage	Breakdown Voltage BV Volts@It			Max. Reverse Leakage	Max. Clamping Voltage	Max. Peak Pulse	Max. Voltage Temp.
		VR(V)	Min(V)	Max(V)	It(mA)	IR(uA)	Vc(V)	Ipp(A)	%/°C
5KP5.0A	5KP5.0CA	5.0	6.40	7.00	50	5000	9.2	543.0	4.0
5KP6.0A	5KP6.0CA	6.0	6.67	7.37	50	5000	10.3	485.0	4.0
5KP6.5A	5KP6.5CA	6.5	7.22	7.98	50	2000	11.2	447.0	4.0
5KP7.0A	5KP7.0CA	7.0	7.78	8.60	50	1000	12.0	417.0	5.0
5KP7.5A	5KP7.5CA	7.5	8.33	9.21	5.0	250	12.9	388.0	6.0
5KP8.0A	5KP8.0CA	8.0	8.89	9.83	5.0	150	13.6	367.0	6.0
5KP8.5A	5KP8.5CA	8.5	9.44	10.40	5.0	50	14.4	347.0	7.0
5KP9.0A	5KP9.0CA	9.0	10.00	11.10	5.0	20	15.4	325.0	8.0
5KP10A	5KP10CA	10.0	11.10	12.30	5.0	15	17.0	294.0	9.0
5KP11A	5KP11CA	11.2	12.20	13.50	5.0	10	18.2	274.0	10.0
5KP12A	5KP12CA	12.2	13.30	14.70	5.0	10	19.9	251.0	11.0
5KP13A	5KP13CA	13.2	14.40	15.90	5.0	10	21.5	232.0	12.0
5KP14A	5KP14CA	14.2	15.60	17.20	5.0	10	23.2	215.0	13.0
5KP15A	5KP15CA	15.2	16.70	18.50	5.0	10	24.4	206.0	15.0
5KP16A	5KP16CA	16.2	17.80	19.70	5.0	10	26.0	192.0	16.0
5KP17A	5KP17CA	17.2	18.90	20.90	5.0	10	27.6	181.0	18.0
5KP18A	5KP18CA	18.2	20.00	22.10	5.0	10	29.2	172.0	19.0
5KP20A	5KP20CA	20.0	22.20	24.50	5.0	10	32.4	154.0	22.0
5KP22A	5KP22CA	22.0	24.40	26.90	5.0	10	35.5	141.0	24.0
5KP24A	5KP24CA	24.0	26.70	29.50	5.0	10	38.9	128.0	27.0
5KP26A	5KP26CA	26.0	28.90	31.90	5.0	10	42.1	119.0	29.0
5KP28A	5KP28CA	28.0	31.10	34.40	5.0	10	45.5	110.0	30.0
5KP30A	5KP30CA	30.0	33.30	36.80	5.0	10	48.4	103.0	35.0
5KP33A	5KP33CA	33.00	36.70	40.60	5.0	10	53.3	94.00	38
5KP36A	5KP36CA	36.00	40.00	44.20	5.0	10	58.1	86.00	40
5KP40A	5KP40CA	40.00	44.40	49.10	5.0	10	64.5	78.00	45
5KP43A	5KP43CA	43.00	47.80	52.80	5.0	10	69.4	72.00	49
5KP45A	5KP45CA	45.00	50.00	55.30	5.0	10	72.7	69.00	51
5KP48A	5KP48CA	48.00	53.30	58.90	5.0	10	77.4	65.00	55
5KP51A	5KP51CA	51.00	56.70	62.70	5.0	10	82.4	61.00	60
5KP54A	5KP54CA	54.00	60.00	66.30	5.0	10	87.1	57.00	64
5KP58A	5KP58CA	58.00	64.40	71.20	5.0	10	93.6	53.00	69
5KP60A	5KP60CA	60.00	66.70	73.70	5.0	10	96.8	52.00	70
5KP64A	5KP64CA	64.00	71.10	78.60	5.0	10	103.0	49.00	75
5KP70A	5KP70CA	70.00	77.80	86.00	5.0	10	113.0	44.00	84
5KP75A	5KP75CA	75.00	83.30	92.10	5.0	10	121.0	41.00	90
5KP78A	5KP78CA	78.00	86.70	95.80	5.0	10	126.0	40.00	94
5KP85A	5KP85CA	85.00	94.40	104.00	5.0	10	137.0	36.00	102
5KP90A	5KP90CA	90.00	100.00	111.00	5.0	10	146.0	34.00	109
5KP100A	5KP100CA	100.00	111.00	136.00	5.0	10	179.0	28.00	134
5KP110A	5KP110CA	110.00	122.00	149.00	5.0	10	196.0	26.00	147
5KP120A	5KP120CA	120.00	133.00	163.00	5.0	10	215.0	23.00	158
5KP150A	5KP150CA	150.00	166.00	204.00	5.0	10	268.0	18.50	200
5KP180A	5KP180CA	180.00	200.00	244.00	5.0	10	320.0	15.00	240

FIG.1-PULSE DERATING CURVE

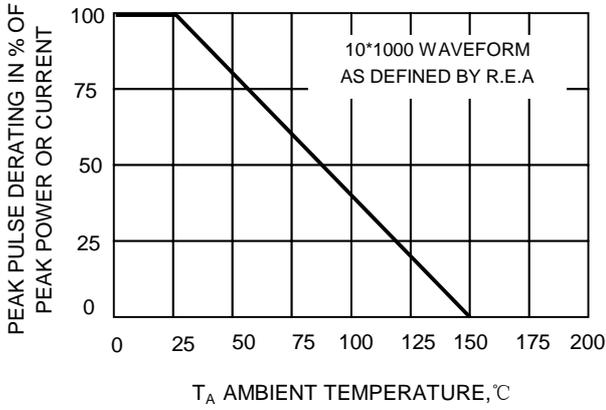


FIG.2-TYPICAL JUNCTION CAPACITANCE

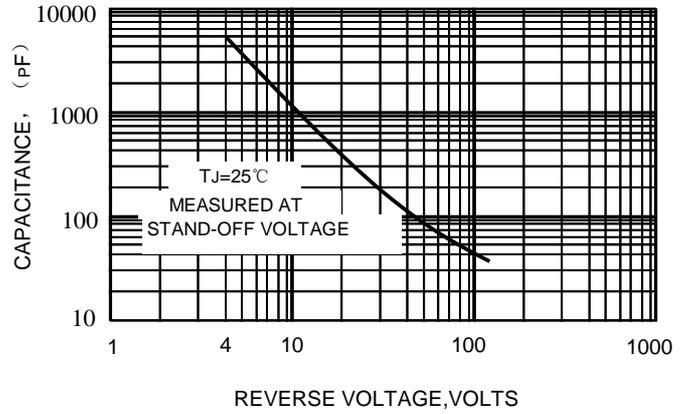


FIG.3-PULSE RATING CURVE

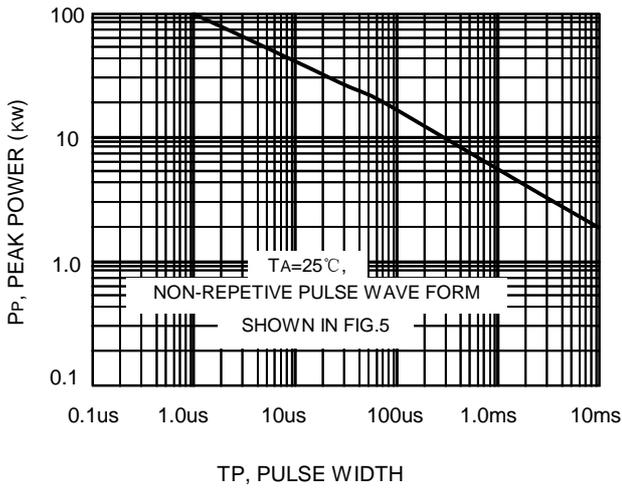


FIG.4-STEADY STATE POWER DERATING CURVE

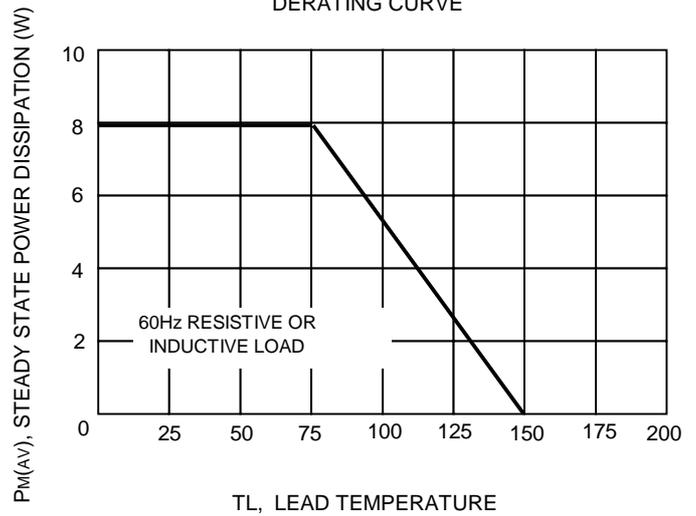


FIG.5 -PULSE WAVEFORM

