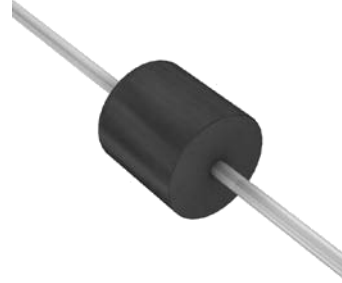


Power TVS in R-6(P600)

Features

- 8000Watts peak pulse power (10/1000 μ s)
- Class passivated junction
- High accuracy, 5% tolerance
- Uni and Bidirectional unit
- Low clamping voltage
- Low Leakage current
- Very fast response time



Mechanical Data

- **Case:** R-6(P600)(plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Computers
- Telecom systems
- Industrial equipments
- Consumer electronic applications
- Other VCC bus and I/O interfaces

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000us waveform ⁽¹⁾ (Fig. 1)	P _{PPM}	8000	W
Peak pulse current with a 10/1000us waveform ⁽¹⁾	I _{PPM}	See Next Table	A
Steady state power dissipation at T _L =75°C, lead lengths 0.375" (9.5mm) ⁽²⁾	P _{M(AV)}	5.0	W
Peak forward surge current 8.3ms single half sine-wave ⁽³⁾	I _{FSM}	100	A
Maximum instantaneous forward voltage @ 100A for unidirectional only	V _F	3.5	V
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

Notes:1.10 X 1000 us, non-repetitive

2. 1/2 sine wave (or equivalent square wave), PW = 8.3 ms, duty cycle = 4 pulses per minute maximum

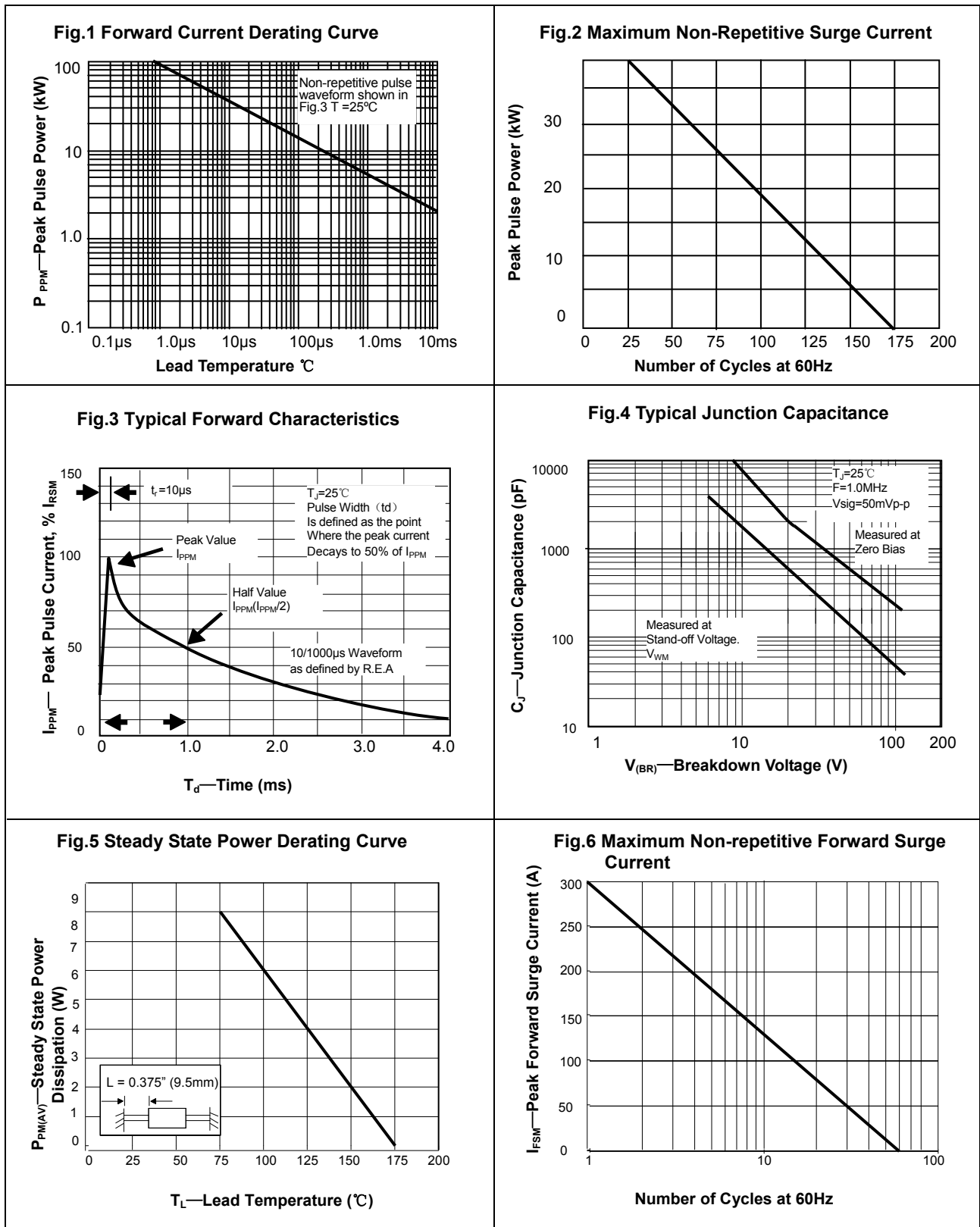
3. Mounted on minimum recommended pad layout

Electrical Characteristics

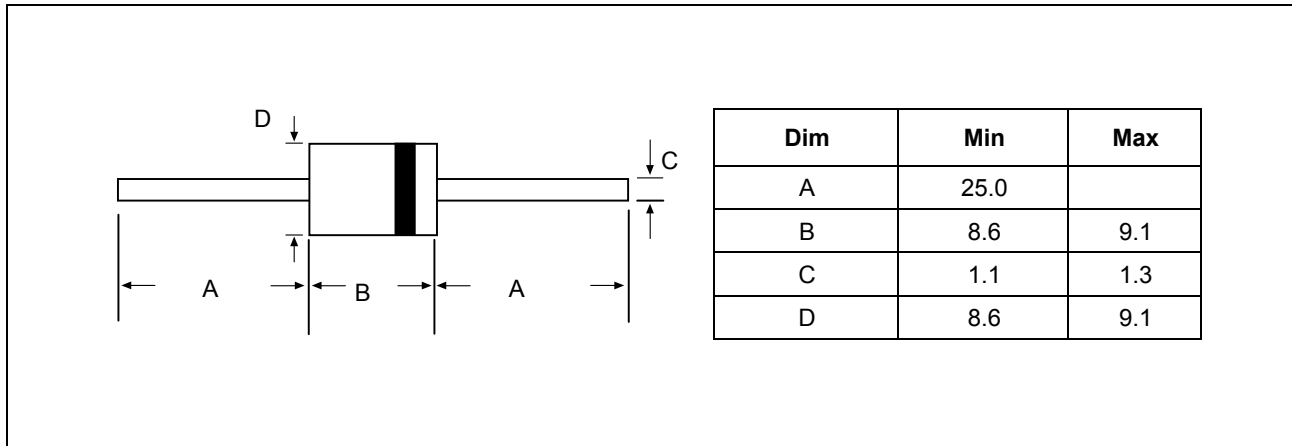
(T_A=25°C, Unless otherwise specified.)

Part Number		Reverse Stand off Voltage VR (Volts)	Breakdown Voltage VBR (Volts) @ IT		Test Current IT (mA)	Maximum Clamping Voltage VC @ IPP (Volts)	Maximum Peak Pulse Current IPP (A)	Maximum Reverse Leakage IR @ VR (μA)
UNI	BI		MIN	MAX				
8KP28A	8KP28CA	28	31.1	34.4	1	45.4	176	1
8KP30A	8KP30CA	30	33.3	36.8	1	48.4	165	1
8KP33A	8KP33CA	33	36.7	40.6	1	53.3	150	1
8KP36A	8KP36CA	36	40	44.2	1	58.1	138	1
8KP40A	8KP40CA	40	44.4	49.1	1	64.5	124	1
8KP43A	8KP43CA	43	47.8	52.8	1	69.4	115	1
8KP45A	8KP45CA	45	50	55.3	1	72.7	110	1
8KP48A	8KP48CA	48	53.3	58.9	1	77.4	103	1
8KP51A	8KP51CA	51	56.7	62.7	1	82.4	97	1
8KP54A	8KP54CA	54	60	66.3	1	87.1	92	1
8KP58A	8KP58CA	58	64.4	71.2	1	93.6	85	1
8KP60A	8KP60CA	60	66.7	73.7	1	96.8	83	1
8KP64A	8KP64CA	64	71.1	78.6	1	103	78	1
8KP70A	8KP70CA	70	77.8	86	1	113	71	1
8KP75A	8KP75CA	75	83.3	92.1	1	121	66	1
8KP78A	8KP78CA	78	86.7	95.8	1	126	63	1
8KP85A	8KP85CA	85	94.4	104	1	137	58	1
8KP90A	8KP90CA	90	100	111	1	146	55	1
8KP100A	8KP100CA	100	111	123	1	162	49	1
8KP110A	8KP110CA	110	122	135	1	177	45	1
8KP120A	8KP120CA	120	133	147	1	193	41	1
8KP130A	8KP130CA	130	144	159	1	209	38	1
8KP150A	8KP150CA	150	167	185	1	243	33	1
8KP160A	8KP160CA	160	178	197	1	259	31	1
8KP170A	8KP170CA	170	189	209	1	275	29	1

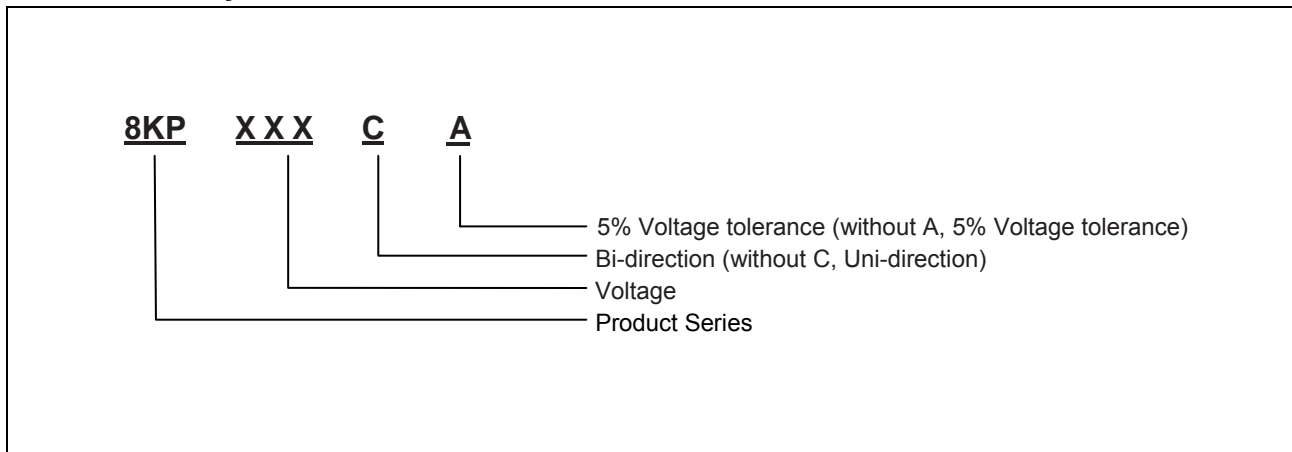
Typical Characteristics ($T_{amb} = 25^\circ\text{C}$ unless otherwise specified)



Package Dimensions



Part number system



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
8KPxxA(CA)	R-6(P600)	BOX	400pcs	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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