



# PJSOT03C-05~PJSOT36C-05

## STANDARD CAPACITANCE TVS ARRAY

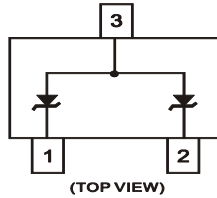
**VOLTAGE** 3 ~ 36 Volt **POWER** 500 Watt

### FEATURES

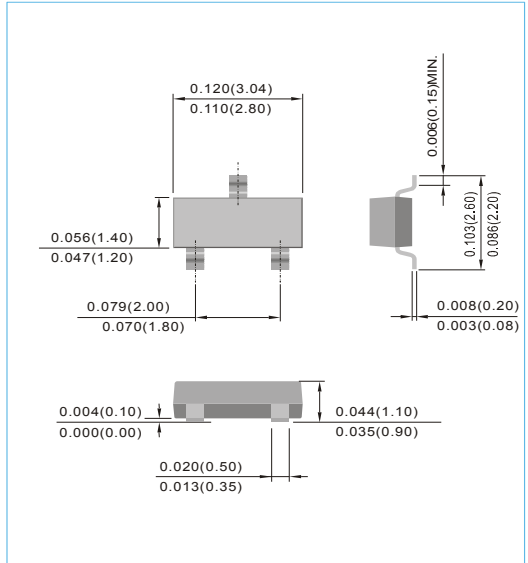
- 500 Watts Peak Pulse Power per Line (  $t_p=8/20\mu s$  )
- Low Clamping Voltage
- Available in Multiple Voltage Types Ranging from 3V and 36V
- Unidirectional & Bidirectional Configurations
- ESD IEC-61000-4-2 Air  $\pm 30kV$ , Contact  $\pm 30kV$
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case: SOT-23
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight: 0.0003 ounce, 0.0084 gram



**SOT-23** Unit : inch(mm)



### DEVICE CHARACTERISTICS

Ratings at 25°C unless otherwise specified.

Parameter	Symbol	Value	Units
Forward Voltage@ 100mA, 300μs-Square Wave	$V_F$	1.5	Volts
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PP}$	500	Watts
ESD IEC-61000-4-2 (Air) ESD IEC-61000-4-2 (Contact)	$V_{ESD}$	$\pm 30$ $\pm 30$	kV
Operating Temperature Range	$T_J$	-50 to 150	°C
Storage Temperature Range	$T_{STG}$	-50 to 150	°C

Part Number	Reverse Stand-off Voltage	Minum Breakdown Voltage	Max Clamping Voltage @ 8/20 μsec	Peak Pulse Current 8/20 μsec	Maximum Leakage Current	Off-State Capacitance, 1MHz Zero dc Bias Note 1	Marking Code
	$V_{RWM}$ Max. V	@ 1mA $V_{BR}$ V	$V_{CL} @ I_{PP}$ V	$I_{PP}$ Max. A	@ $V_{RWM} I_D$ μA	Cd Max. pF	
PJSOT03C-05	3	4	6.5	43	125	500	1EC
PJSOT05C-05	5	6	9.8	42	20	550	2EC
PJSOT08C-05	8	8.5	13.4	34	10	250	3EC
PJSOT12C-05	12	13.3	19	21	2	150	4EC
PJSOT15C-05	15	16.7	24	17	1	100	5EC
PJSOT24C-05	24	26.7	43	12	1	88	6EC
PJSOT36C-05	36	40	75	9	1	85	7EC

Note 1: Capacitance is measured between Pin 3 and either Pin 1 or 2 for the PJSOT03-05C and PJSOT36C-05 individual capacitance is measured between Pin 1 to Pin 3 or Pin2 to Pin 3.



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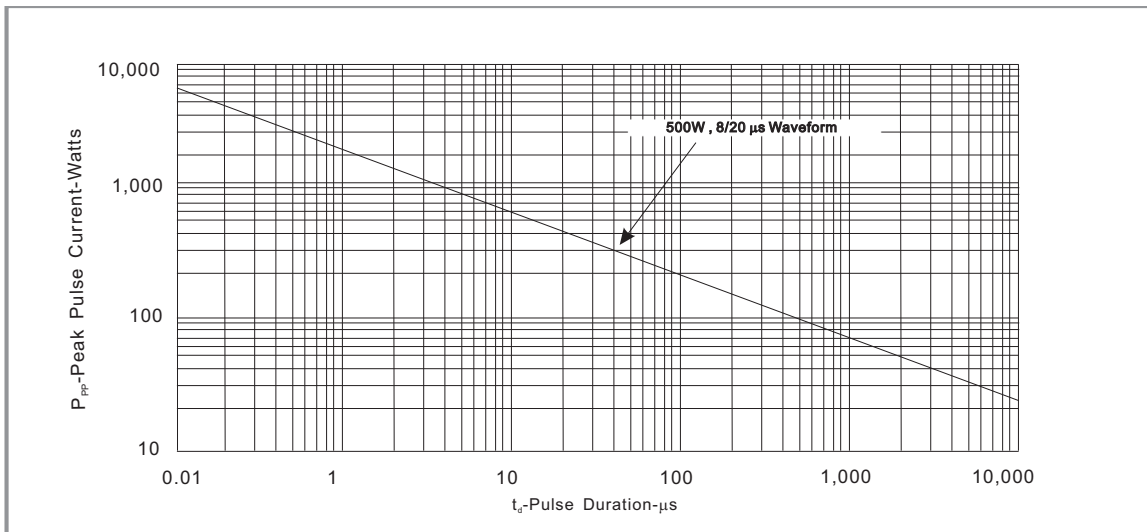


FIG.1- PEAK PULSE POWER VS PULSE TIME

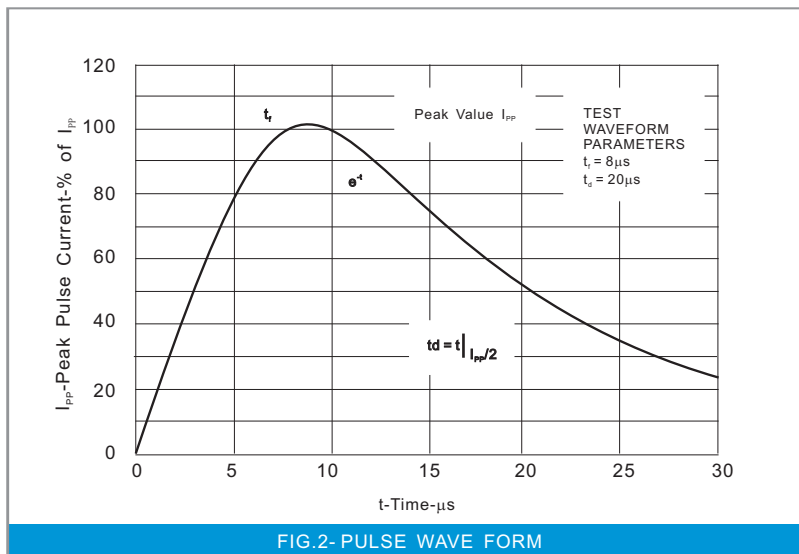


FIG.2- PULSE WAVE FORM

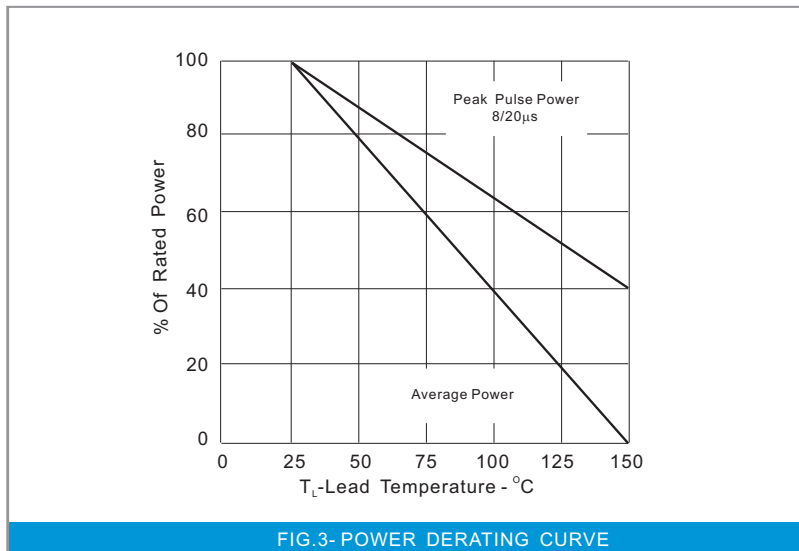
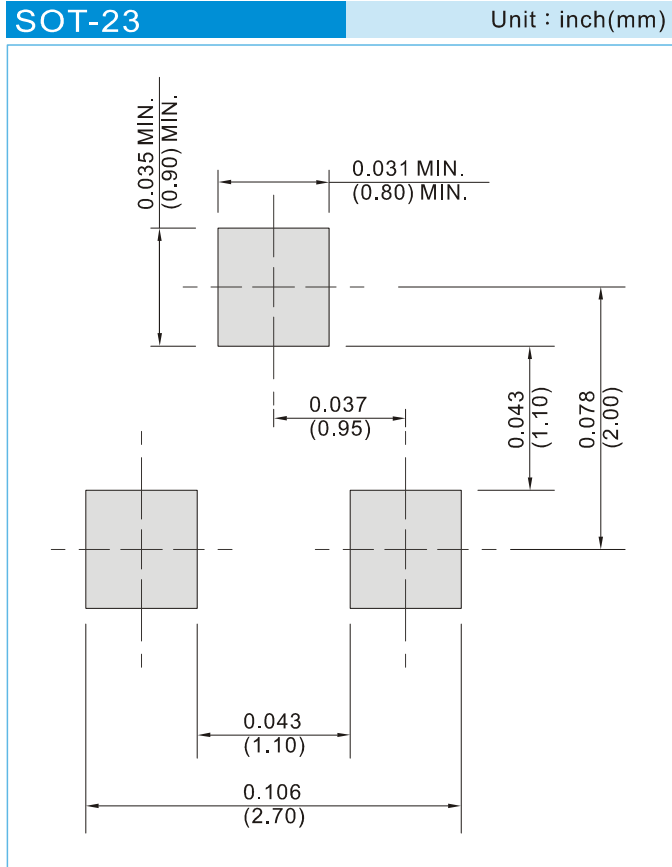


FIG.3- POWER DERATING CURVE



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel



# PJSOT03C-05~PJSOT36C-05

**Part No\_packing code\_Version**

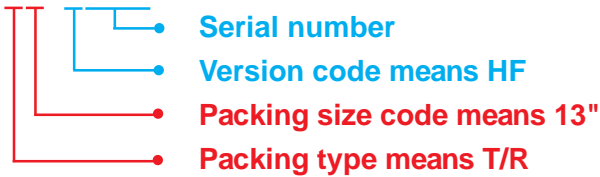
PJSOT03C-05\_R1\_00001

PJSOT03C-05\_R2\_00001

For example :

**RB500V-40\_R2\_00001**

Part No.



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			