

# KP20NU11

## Thyristor Surge Suppressors 60V, 325A

### Feature

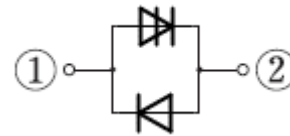
- Uni-Directional
- High-speed response characteristic
- Large surge current capacity
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): 2F



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-40 to 125	°C
Junction temperature	T <sub>j</sub>		125	°C
Non-repetitive peak reverse voltage	V <sub>DSM</sub>		92	V
Repetitive peak reverse voltage	V <sub>DRM</sub>		60	V
Peak surge on-state current	I <sub>TSM</sub>	V=10/700µs 13kV, Non-Repetitive, R=15+25Ω	325	A
Peak surge forward current	I <sub>FSM</sub>	V=10/700µs 13kV, Non-Repetitive, R=15+25Ω	325	A

\* : See the original Specifications

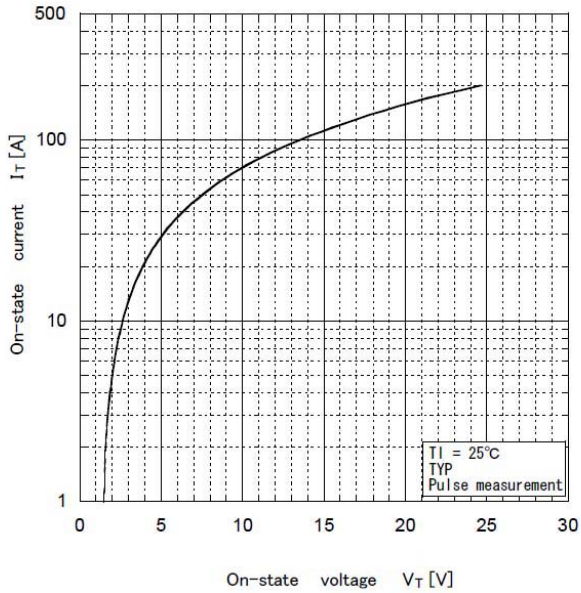
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakover voltage	$V_{BO}$	$dV/dt=8V/ms$	100		115	V
Clamping voltage	$V_{CL}$	$dV/dt=100V/\mu s$			130	V
Off-state current	$I_{DSM}$	$V_D=92V$			5	$\mu A$
Holding current	$I_H$	Pulse measurement	150			mA
On-State Voltage	$V_T$	$I_T=2A$			5	V
Junction capacitance	$C_j$	$f=160kHz, V_D=14V, OSC=20mV$		295		pF

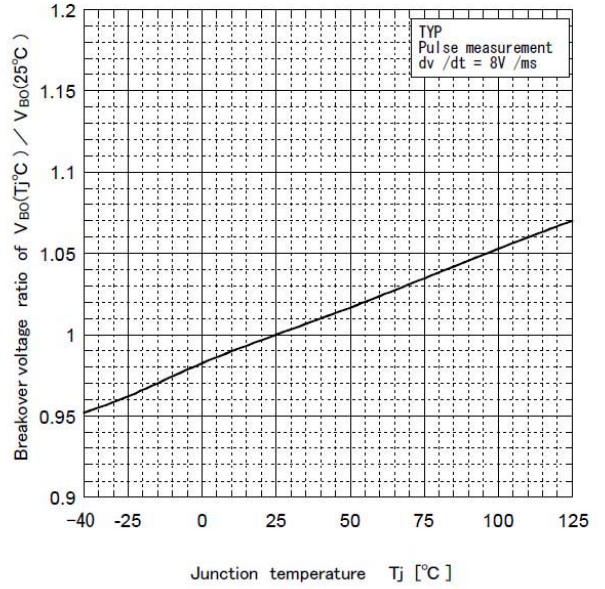
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

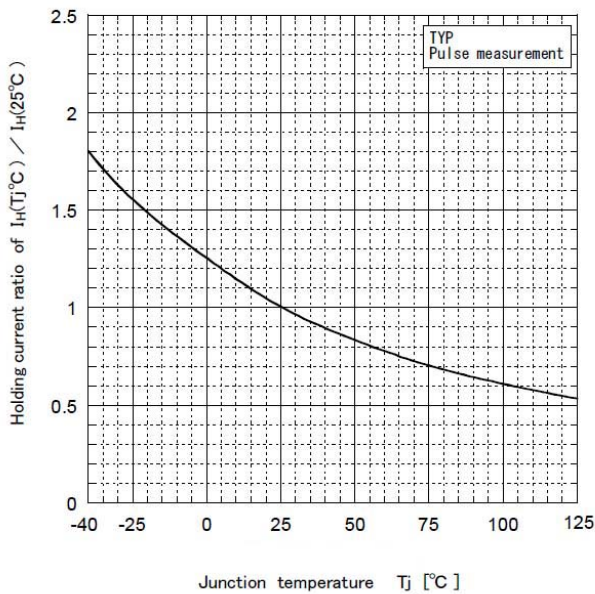
On-state voltage vs On-state current



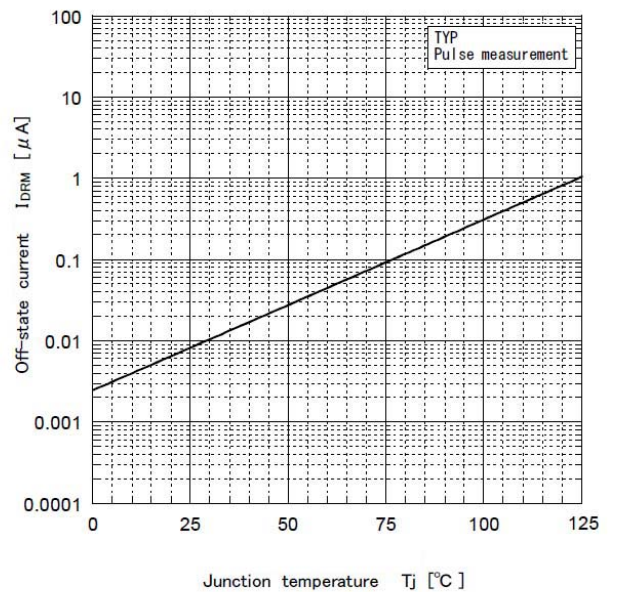
Breakover voltage vs Junction temperature

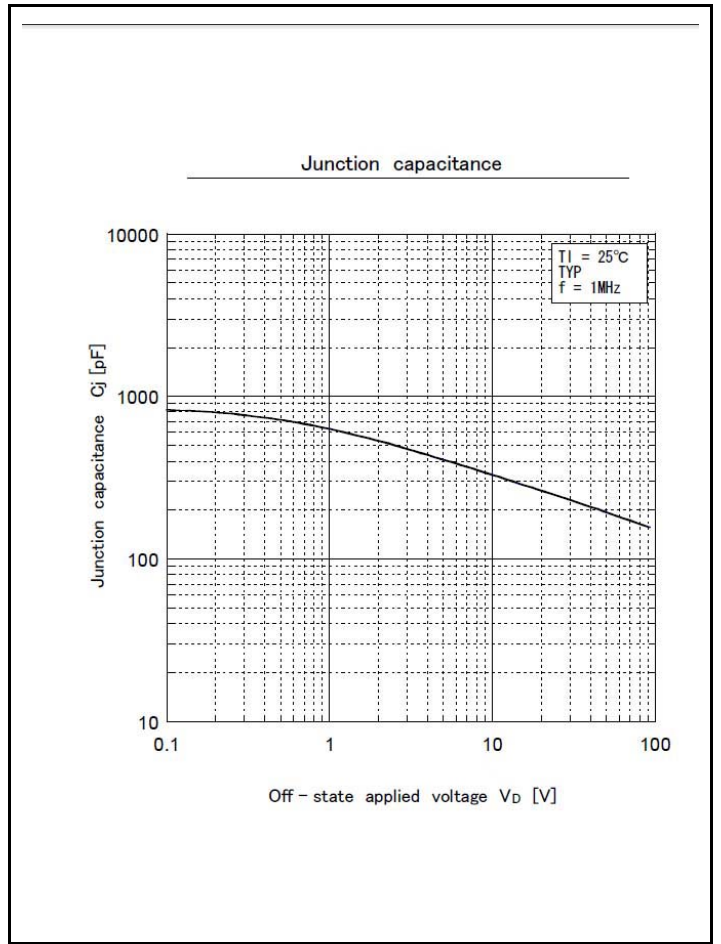
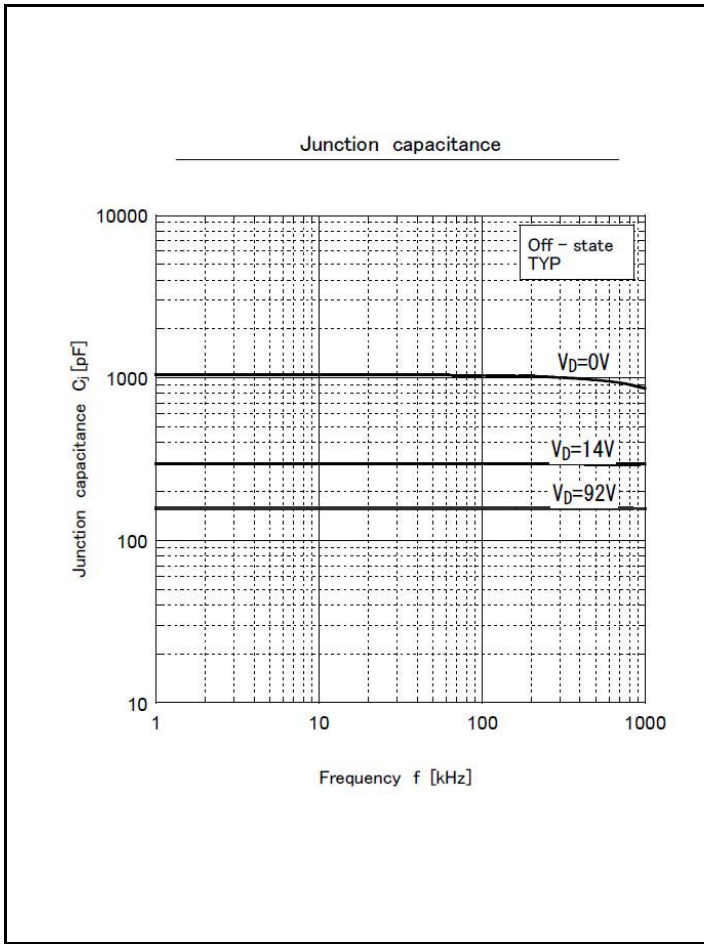


Holding Current vs Junction Temperature



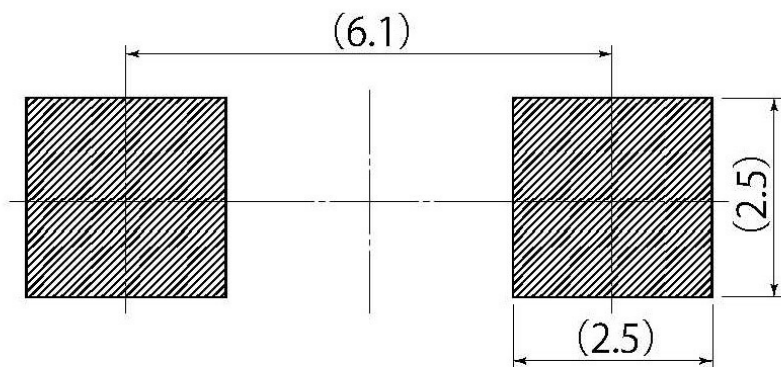
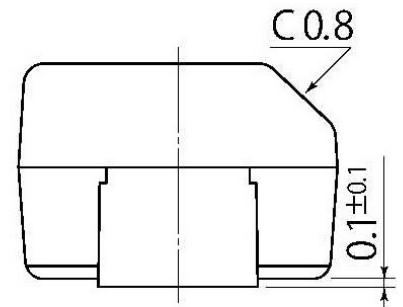
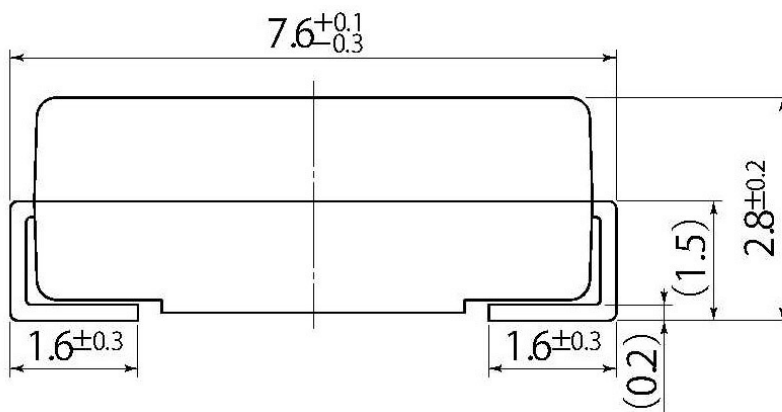
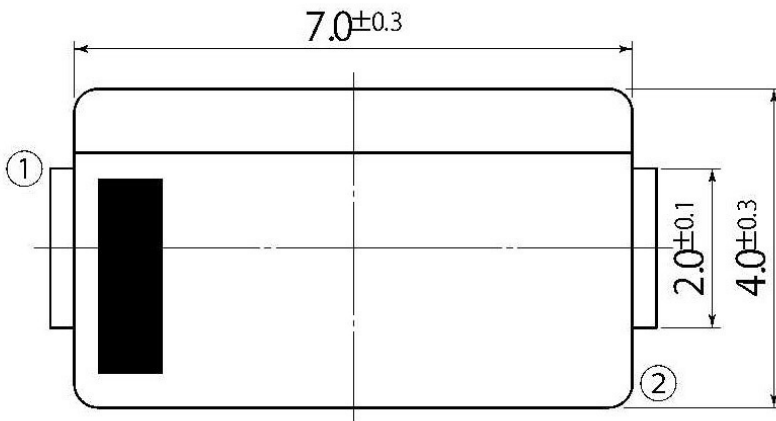
Off-state current vs Junction temperature





B9

JEDEC Code	—
JEITA Code	—
House Name	2F



Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condition.