

ST70-27F

TVS
180A, 7000W

Feature

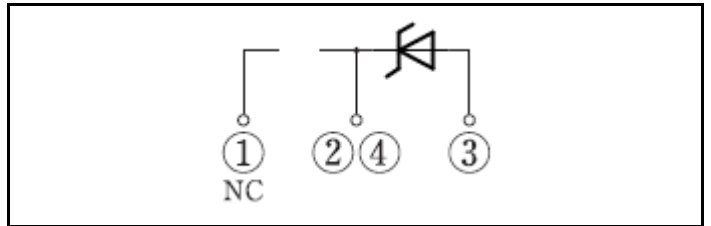
- Peak pulse power:7000W
- SMD
- Available for automotive use
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): STO-220
Package (JEITA Code): SC-83 similar



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-40 to 150	°C
Operating junction temperature	T _j		150	°C
Maximum surge reverse current	I _{RSM}	10/1000μs, Non-repetitive	180	A
Maximum surge reverse power	P _{RSM}	10/1000μs, Non-repetitive	7000	W
Continuous (direct) reverse voltage	V _{R(DC)}		23	V
Maximum forward power	P _F	T _I =25°C	5	W

※ :See the original Specifications

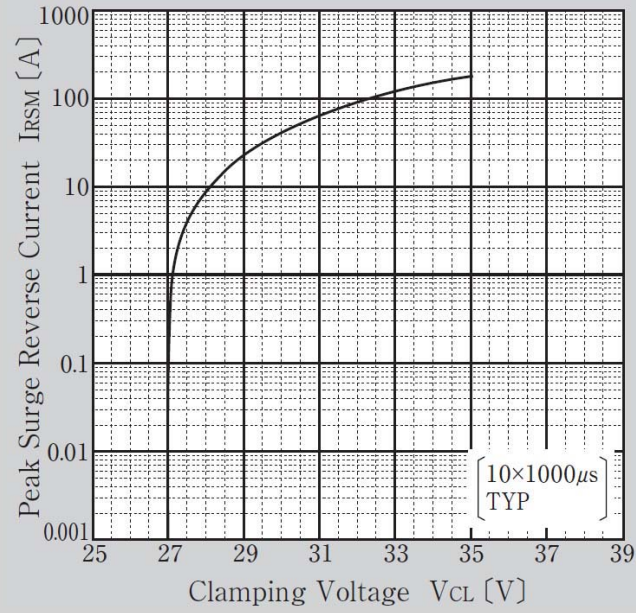
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V _{BR}	I _R =1mA, Pulse measurement	24.3	27	29.7	V
Reverse current	I _R	V _R =23V			5	μA
Forward voltage	V _F	I _F =30A, Pulse Measurement			1.3	V
Restriction voltage	V _{CL}	10/1000μs, I _{pp} =180A *			40	V
Temperature coefficient	rz				0.09	%/°C

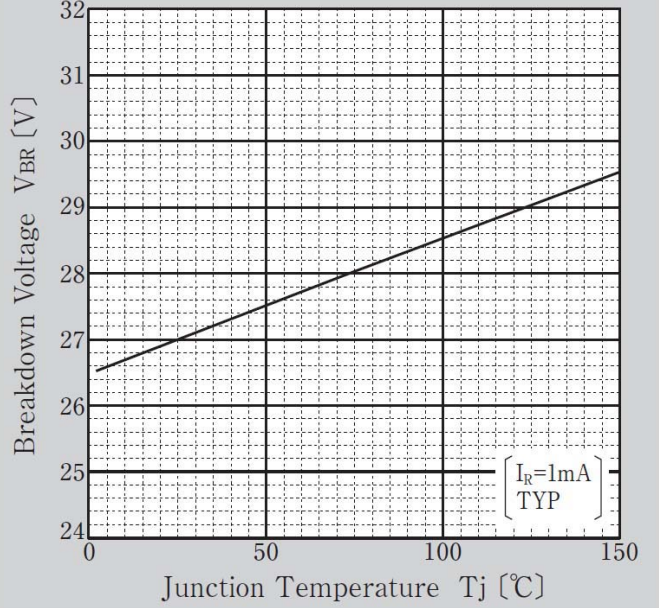
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

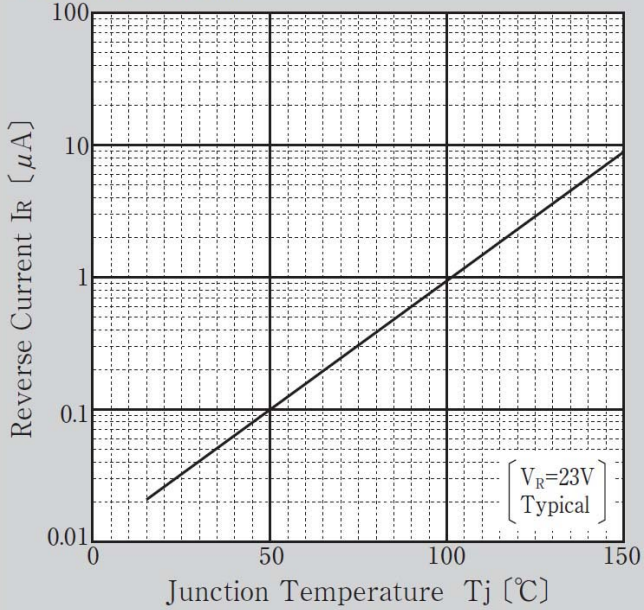
Clamping Voltage



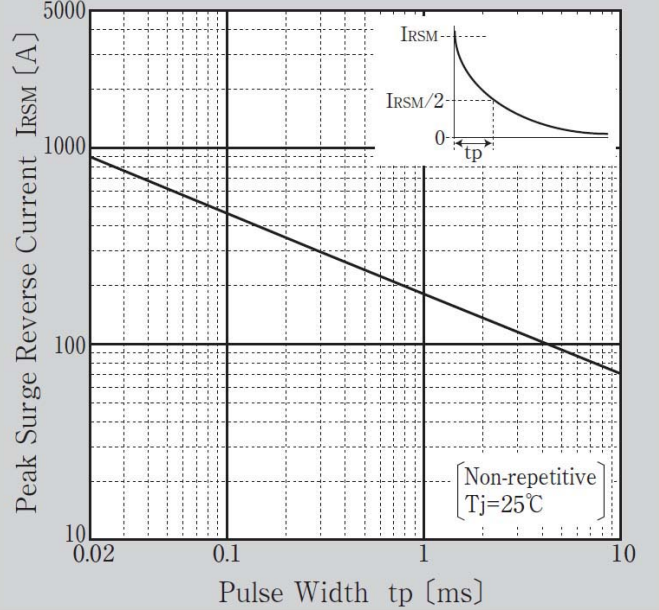
Breakdown Voltage

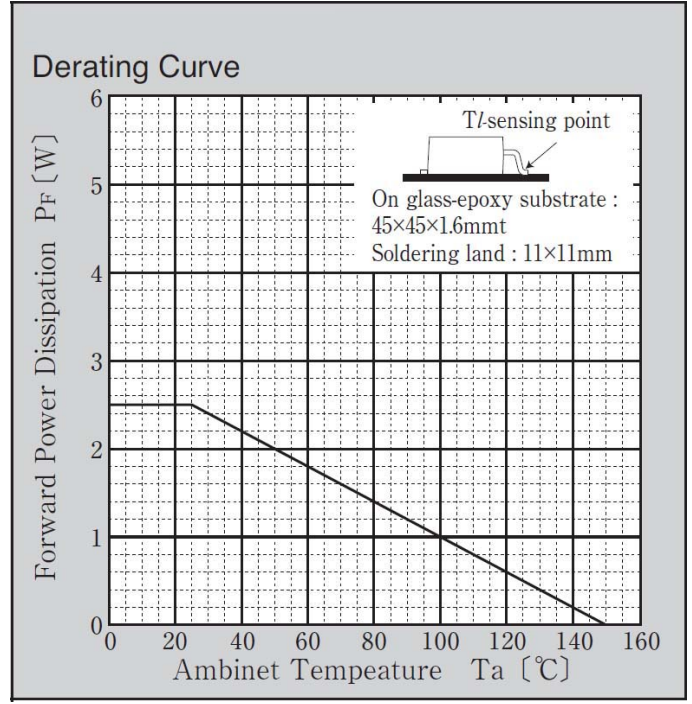
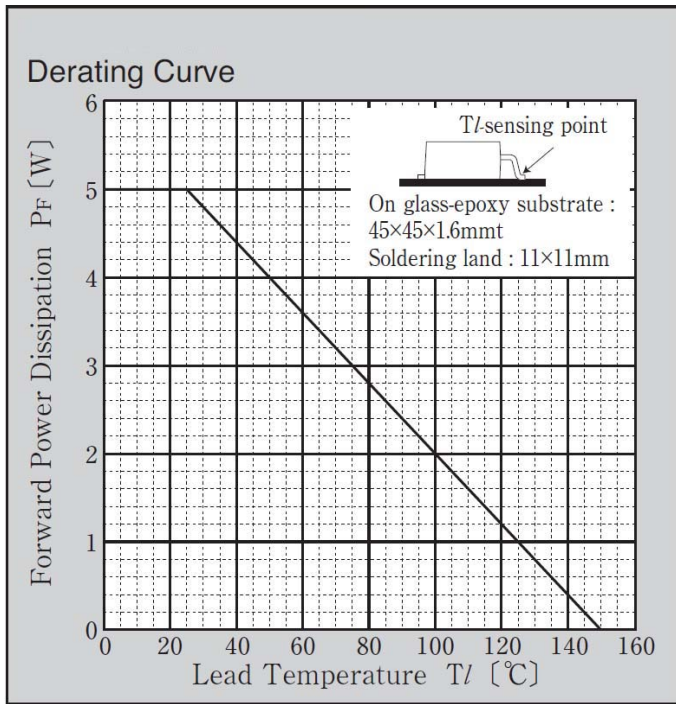
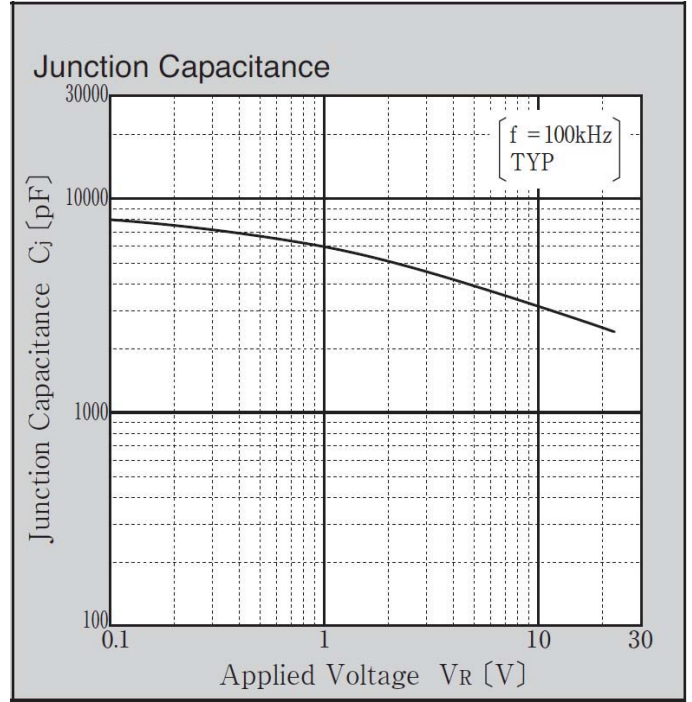
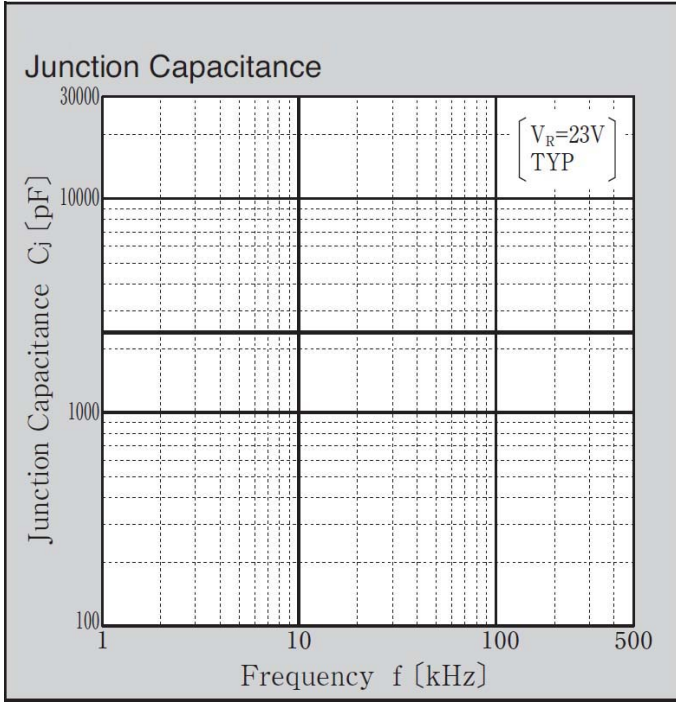


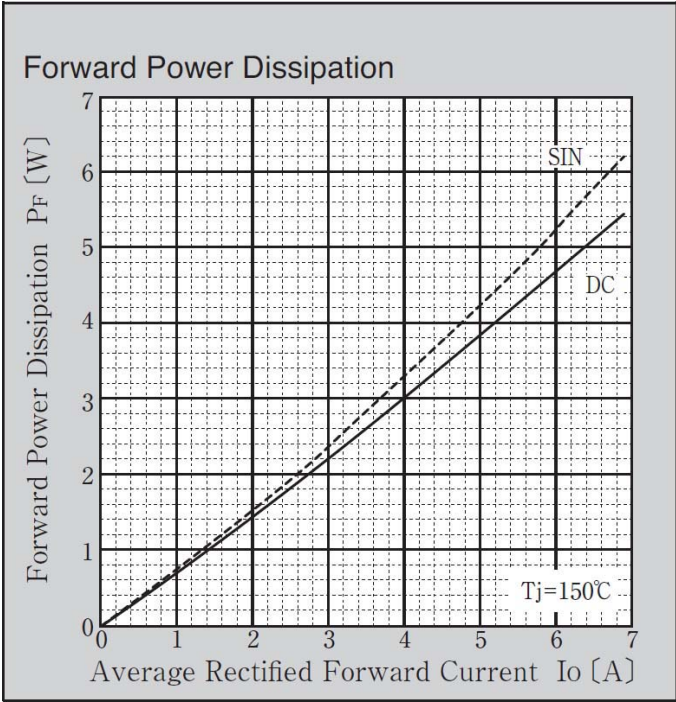
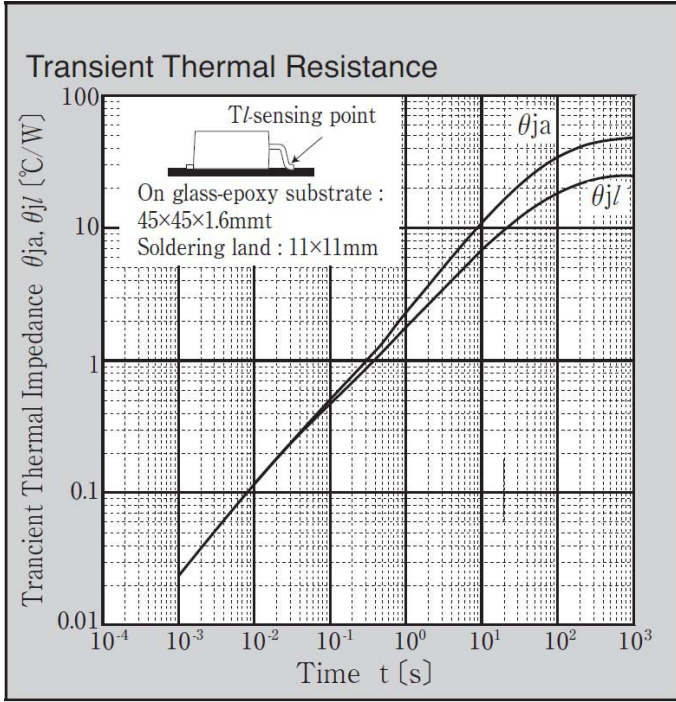
Reverse Current



Peak Surge Reverse Current

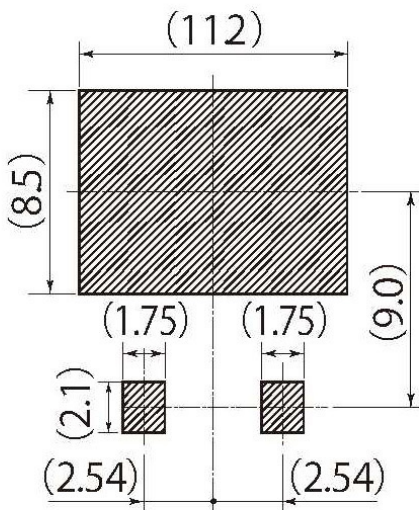
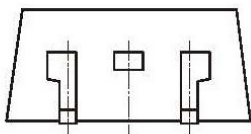
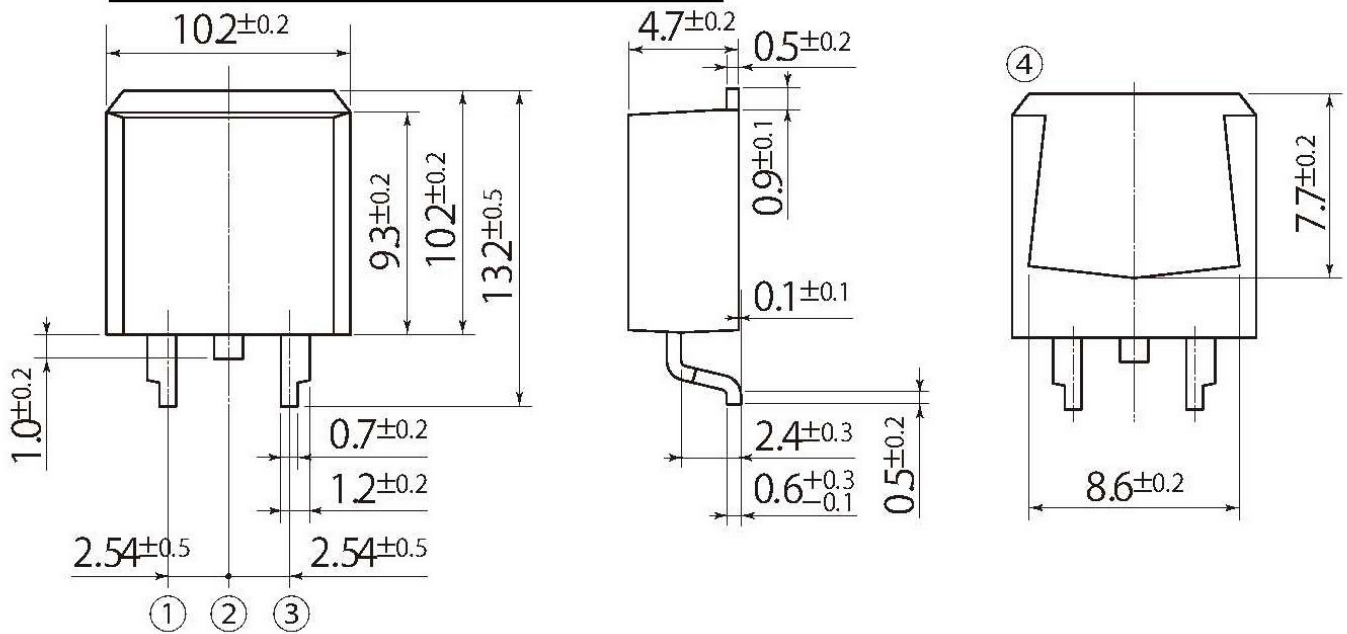






H1

JEDEC Code	-
JEITA Code	SC-83 similar
House Name	STO-220



Referential Soldering Pad

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

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