

# DF10SC6

Schottky Barrier Diodes  
60V, 10A

## Feature

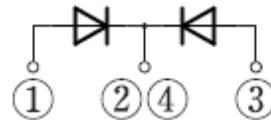
- SMD
- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

## OUTLINE

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



## Equivalent circuit



## Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 150	$^\circ\text{C}$
Junction temperature	$T_j$		150	$^\circ\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		60	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	$I_{F(AV)}$	50Hz sine wave, Resistance load, Rating for each diode $I_{F(AV)}/2$ , $T_c=132^\circ\text{C}$	10	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	150	A
Repetitive peak surge reverse power	$P_{RRSM}$	Pulse width $10\mu\text{s}$ , $T_j=25^\circ\text{C}$ , per diode	330	W

※ :See the original Specifications

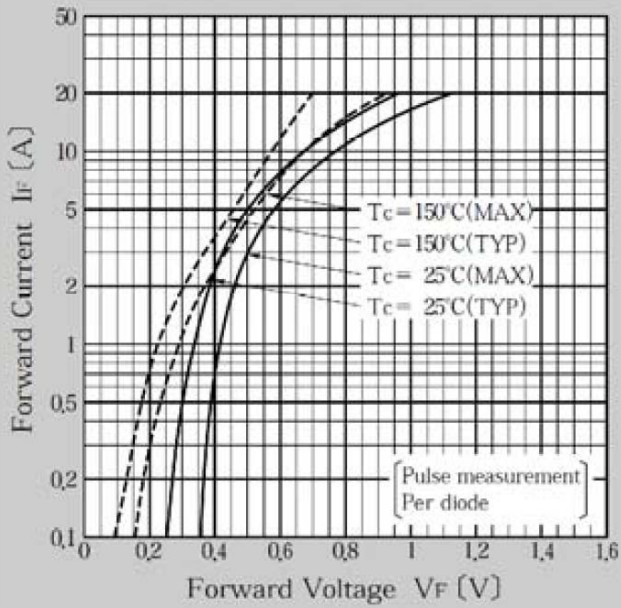
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=5A, Pulse measurement, per diode			0.58	V
Reverse current	I <sub>R</sub>	VR=60V, Pulse measurement, per diode			4.5	mA
Total capacitance	C <sub>t</sub>	f=1MHz, VR=10V, per diode		260		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			2	°C/W

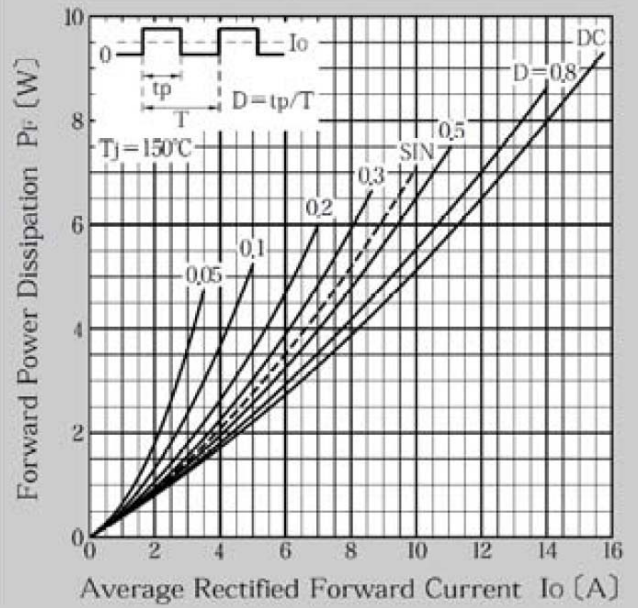
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

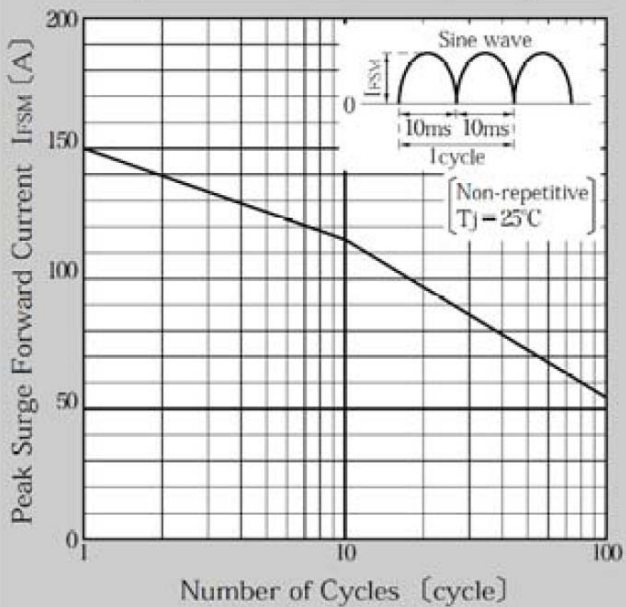
### Forward Voltage



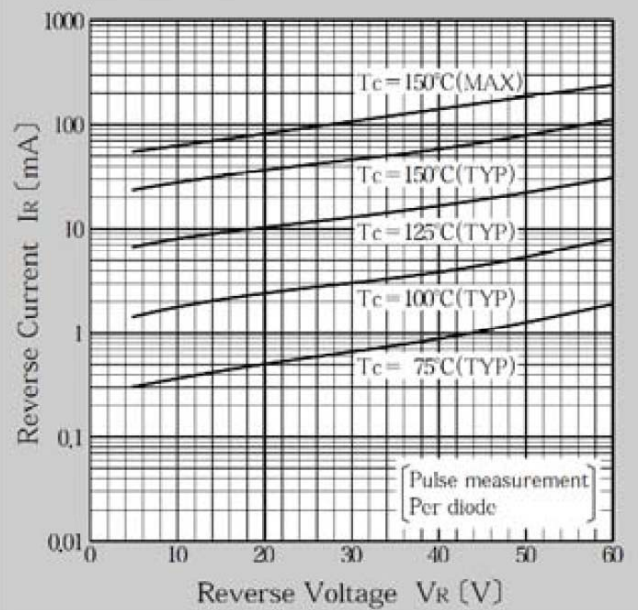
### Forward Power Dissipation



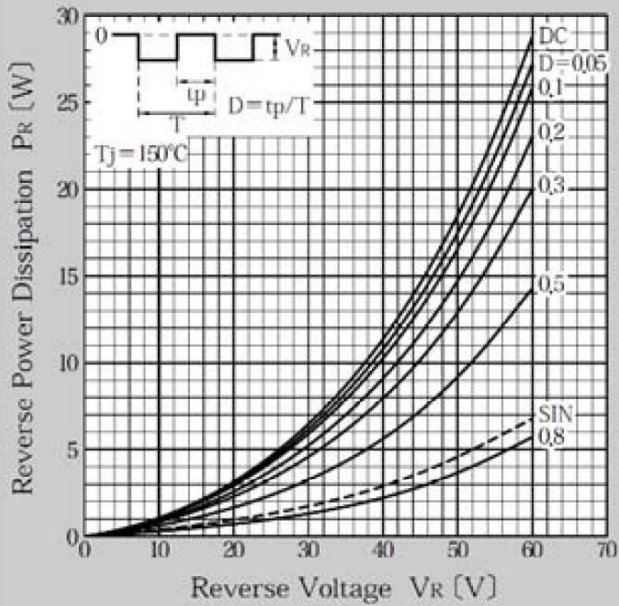
### Peak Surge Forward Current Capability



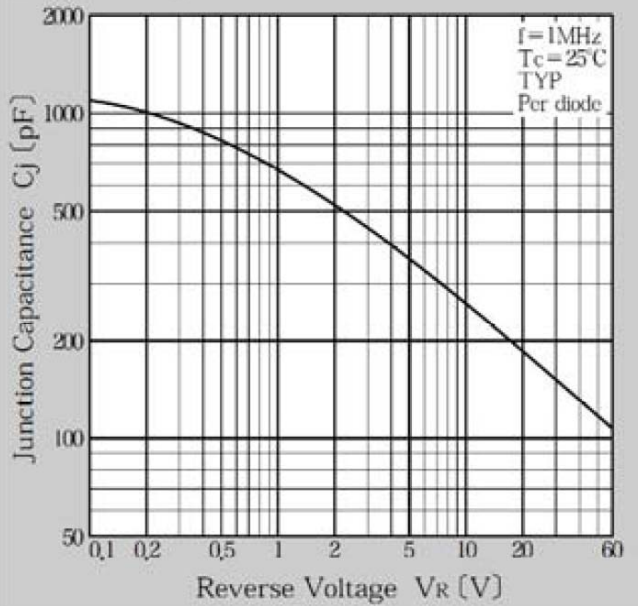
### Reverse Current



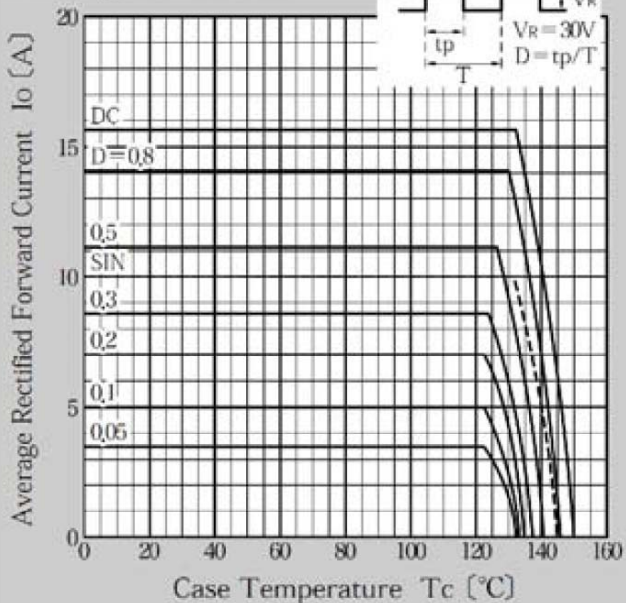
### Reverse Power Dissipation



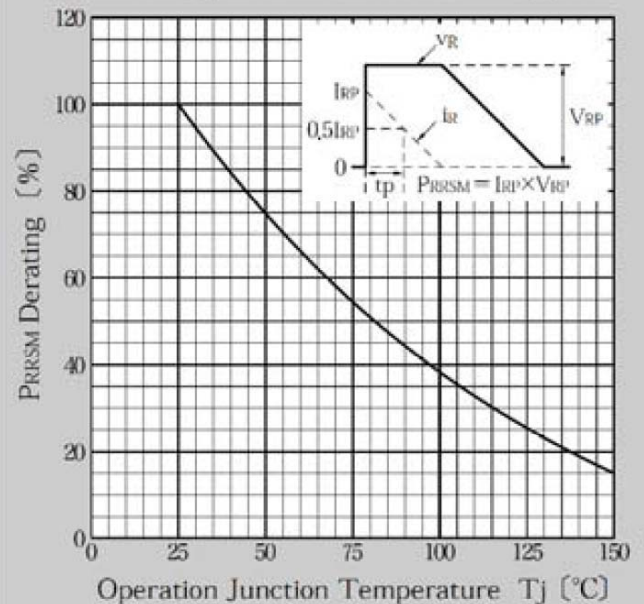
### Junction Capacitance



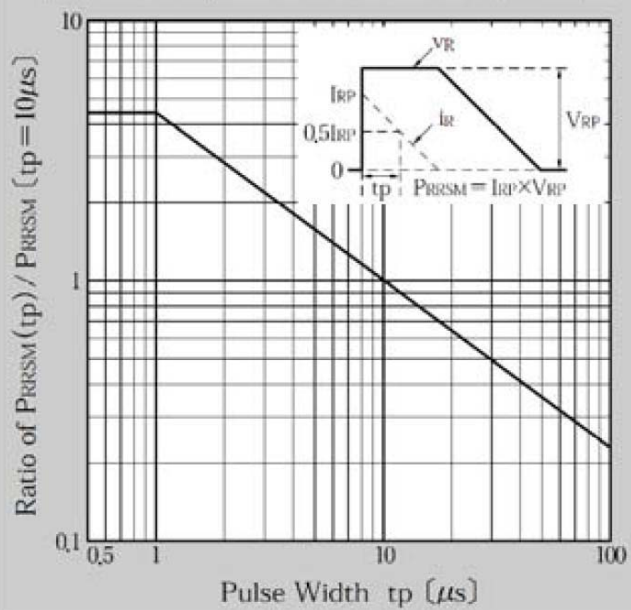
### Derating Curve $T_c$ - $I_o$



### Repetitive Surge Reverse Power Derating Curve



### Repetitive Surge Reverse Power Capability



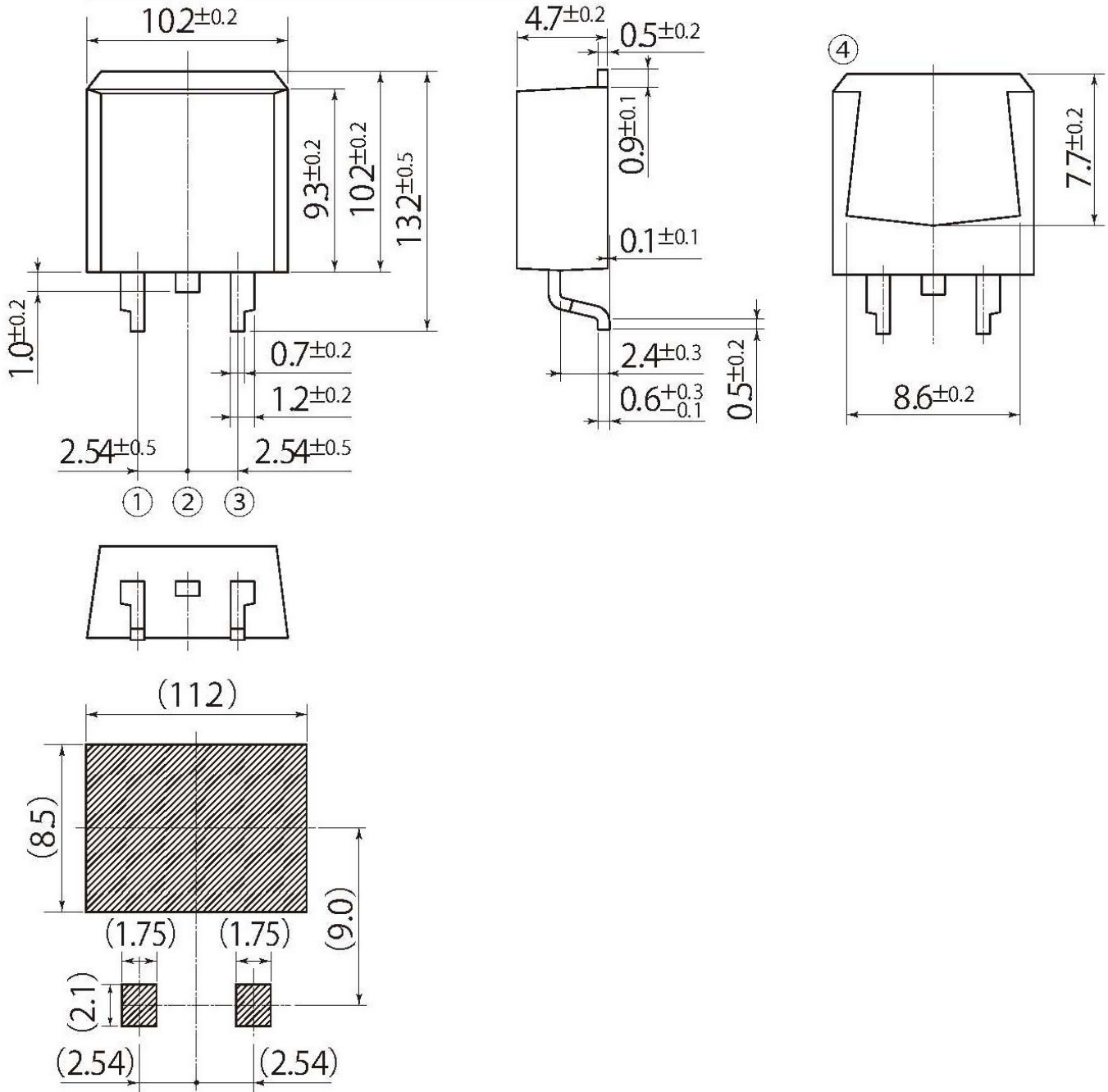
# Outline Dimensions

unit:mm

scale: 3/1

## 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.

## Notes

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