

# DF30JC4

Schottky Barrier Diodes  
40V, 30A

**Feature**

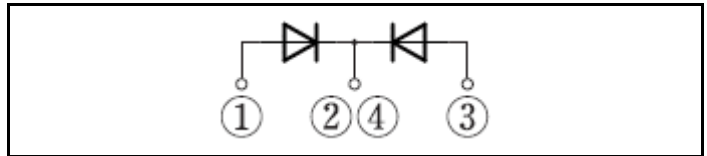
- SMD
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

**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	Tstg		-55 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	VRRM		40	V
Repetitive peak surge reverse voltage	VRRSM	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=115°C	30	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	250	A

※ :See the original Specifications

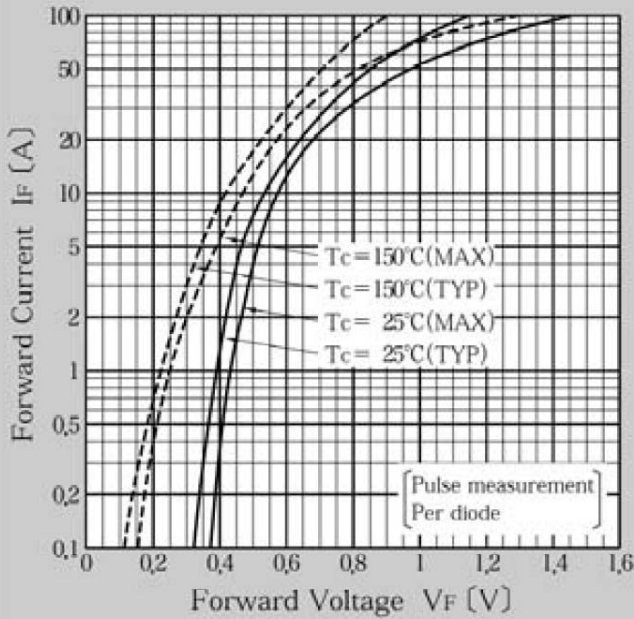
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =15A, Pulse measurement, per diode			0.61	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =40V, Pulse measurement, per diode			0.7	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per diode		560		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			1.6	°C/W

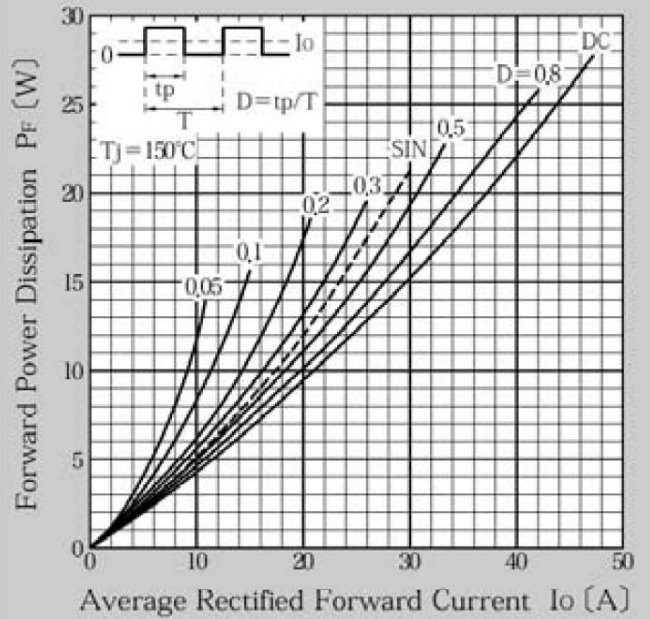
\* : See the original Specifications

# CHARACTERISTIC DIAGRAMS

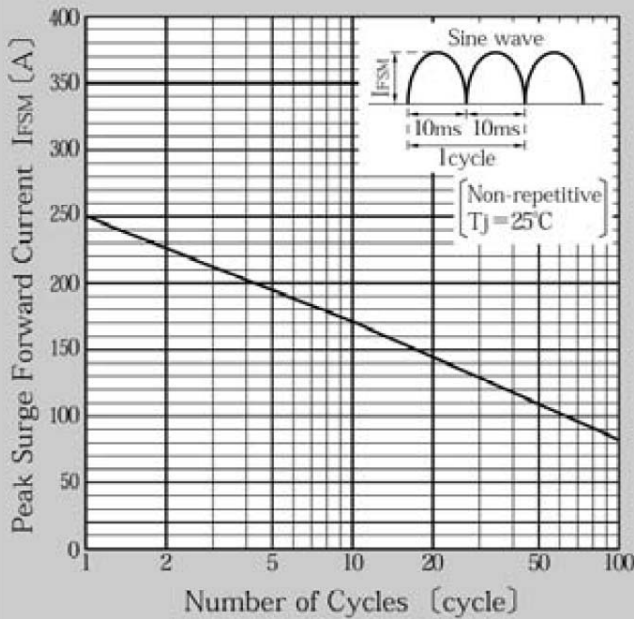
### Forward Voltage



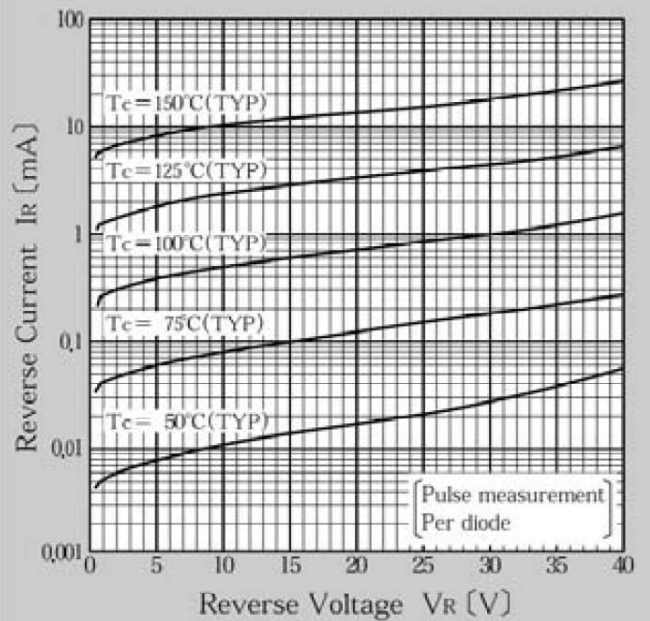
### Forward Power Dissipation



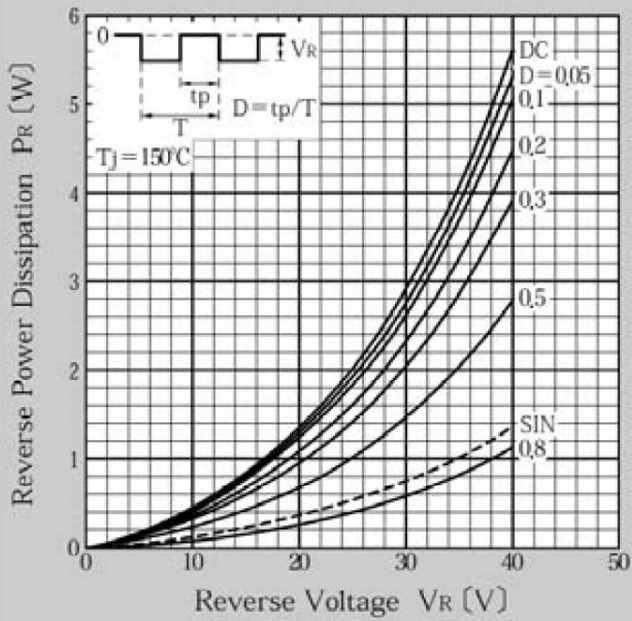
### Peak Surge Forward Current Capability



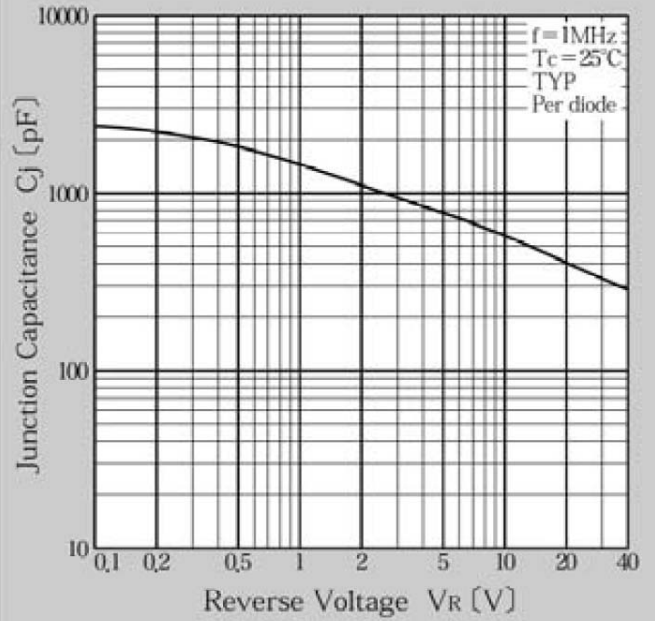
### Reverse Current



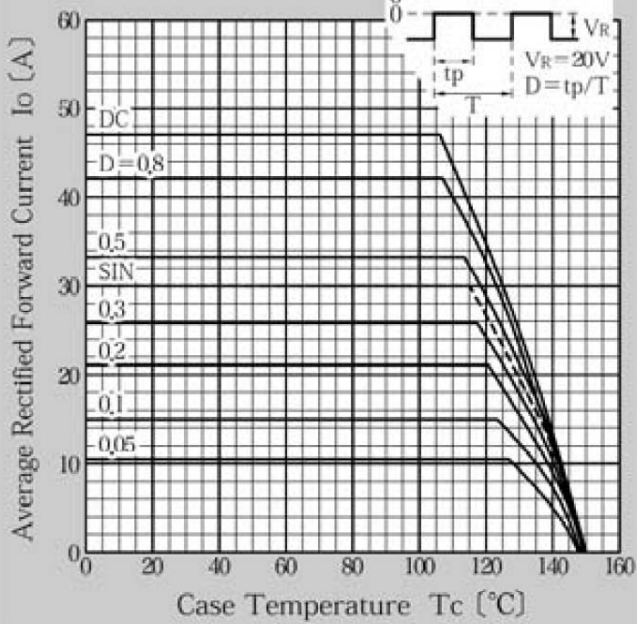
### Reverse Power Dissipation



### Junction Capacitance

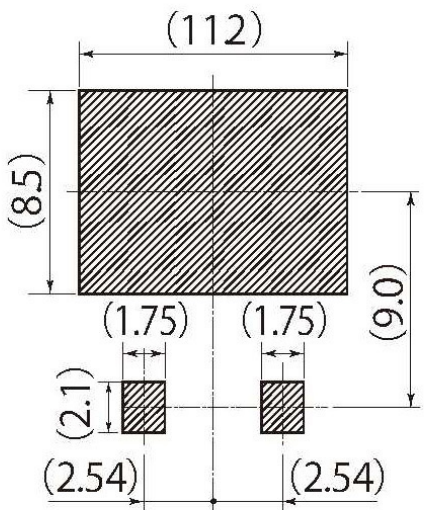
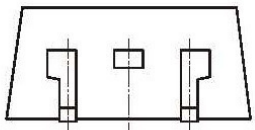
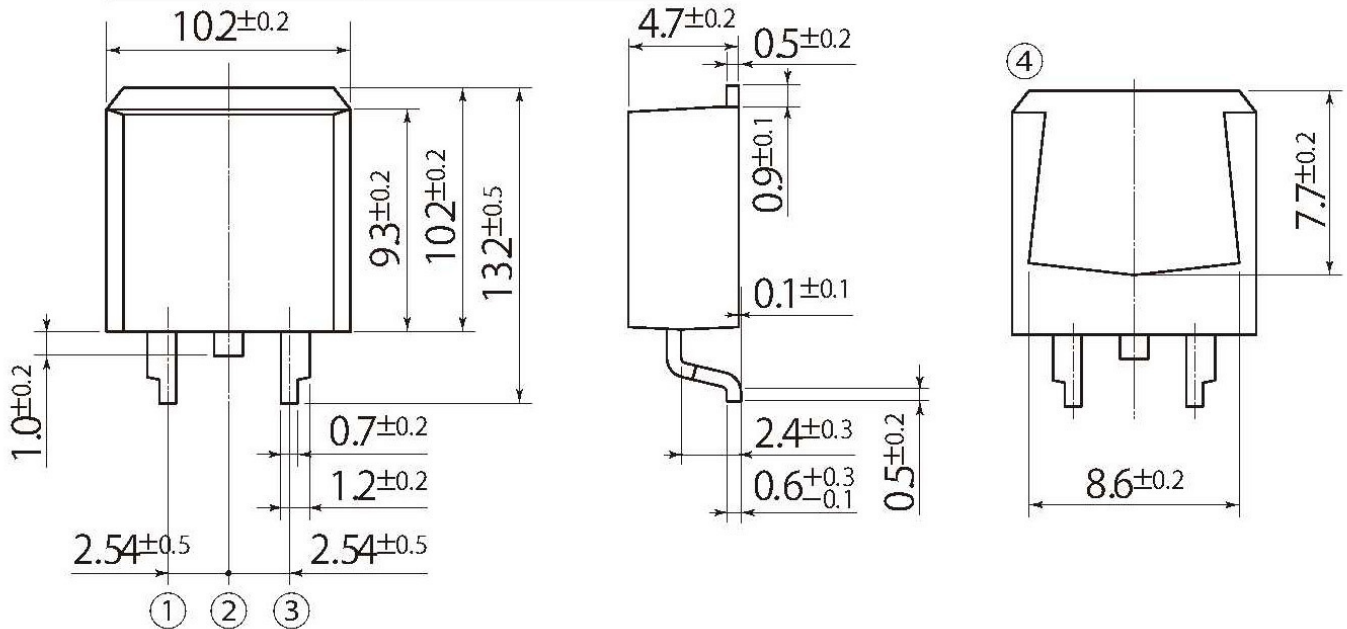


### Derating Curve $T_c$ - $I_o$



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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