

# DF30SC4M

# Schottky Barrier Diodes 40V, 30A

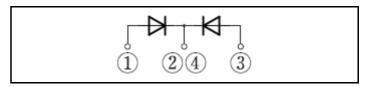
### **Feature**

- SMD
- · High Recovery Speed
- Low V<sub>F</sub>
- Pb free terminal
- RoHS:Yes

## **OUTLINE**



# **Equivalent circuit**



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	$V_{RRM}$		40	V
Repetitive peak surge reverse voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	I <sub>F</sub> (AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=112°C	30	Α
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	360	Α
Repetitive peak surge reverse power	P <sub>RRSM</sub>	Pulse width 10μs, Tj=25°C, per diode	1000	W

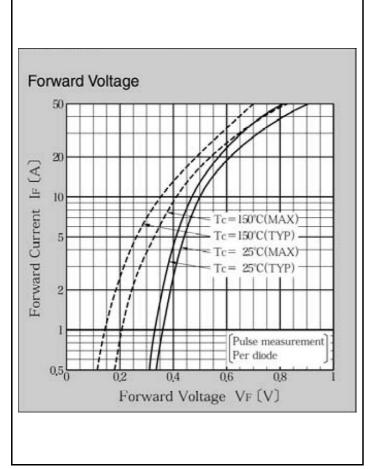
<sup>\* :</sup>See the original Specifications

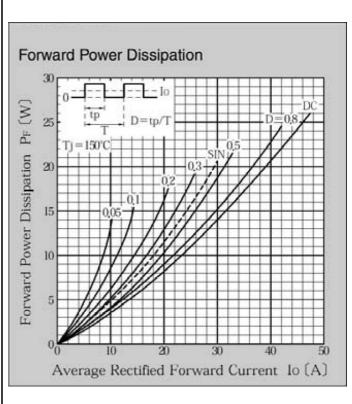
# **Electrical Characteristics** (unless otherwise specified : Tc=25°C)

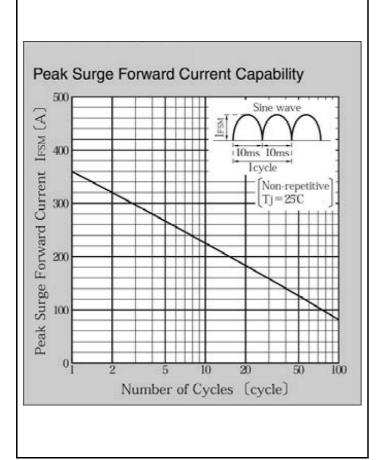
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	Ot
Forward voltage	V <sub>F</sub>	IF=15A, Pulse measurement, per diode			0.55	V
Reverse current	I <sub>R</sub>	VR=40V, Pulse measurement, per diode			10	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		590		pF
Thermal resistance	Rth(j-c)	Junction to case			1.6	°C/W

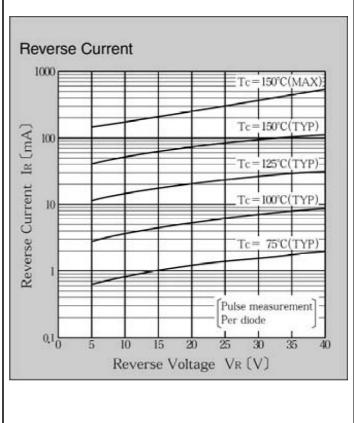
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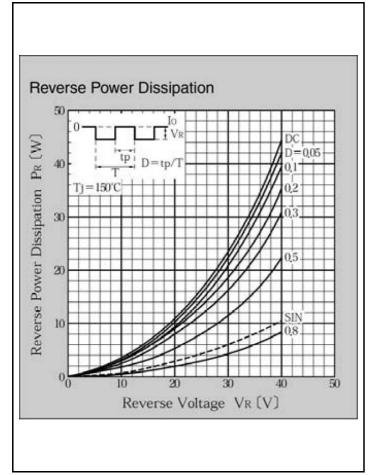
# **CHARACTERISTIC DIAGRAMS**

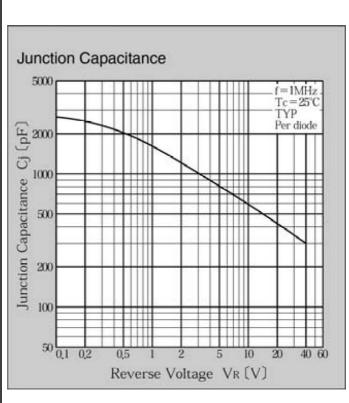


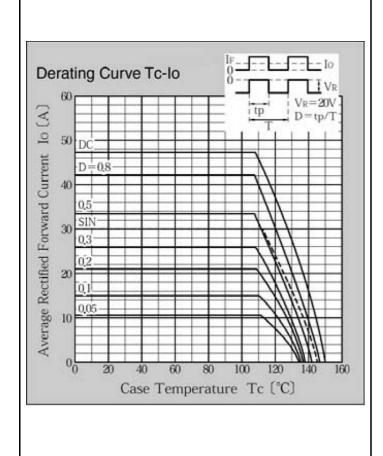


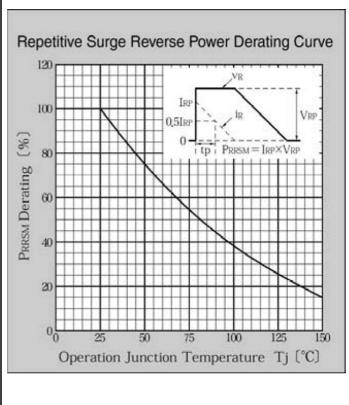


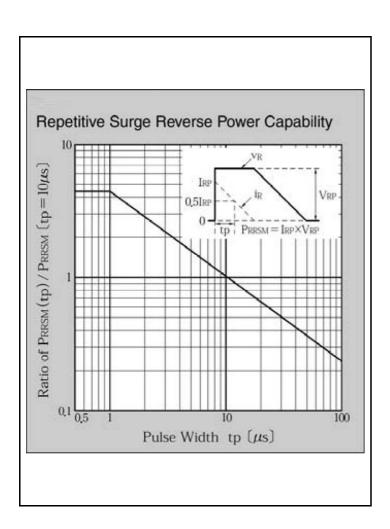






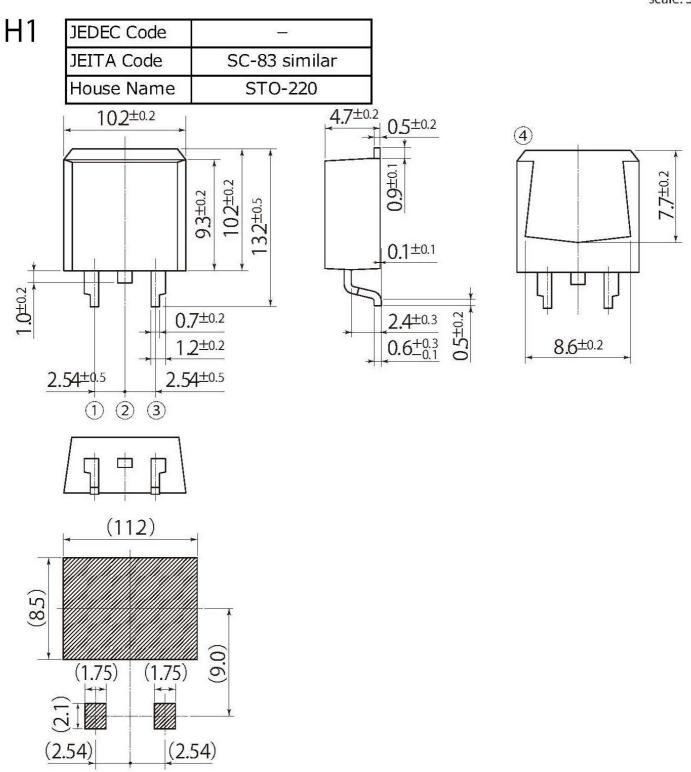






unit:mm

scale: 3/1



<sup>•</sup> Optimize soldering pad to the board design and soldering condition.

Referential Soldering Pad

#### **Notes**

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