

DF10LC30

Fast Recovery Diodes

300V, 10A

Feature

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

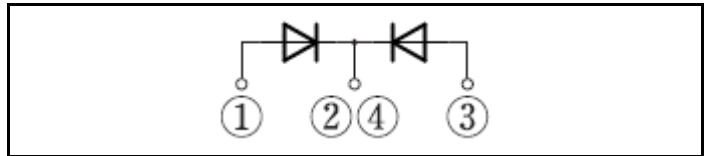
OUTLINE

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	T _{stg}		-55 to 150	°C
Junction temperature	T _j		150	°C
Repetitive peak reverse voltage	V _{RRM}		300	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Rating for each diode I _{F(AV)} /2, T _c =124°C	10	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, T _j =25°C	80	A

* :See the original Specifications

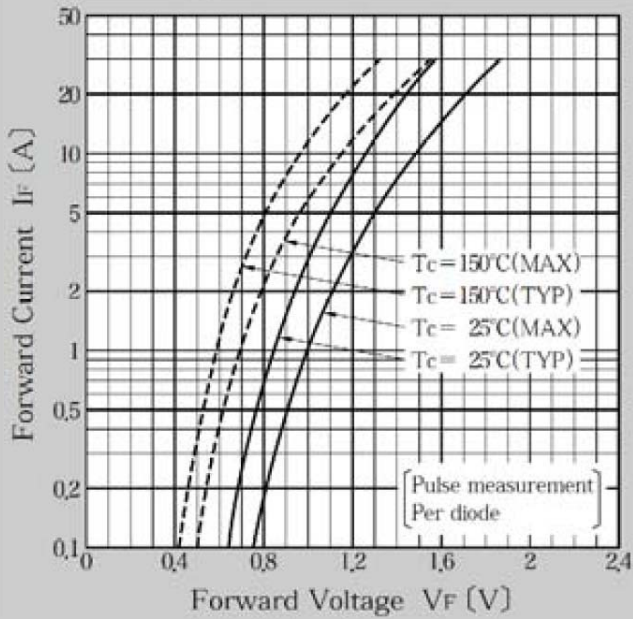
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =5A, Pulse measurement, Per diode			1.3	V
Reverse current	I _R	V _R =300V, Pulse measurement, Per diode			25	μA
Reverse recovery time	t _{rr}	I _F =0.5A, I _R =1.0A, 0.25I _R , Per Diode			30	ns
Total capacitance	C _t	f=1MHz, V _R =10V, Per Diode		50		pF
Thermal resistance	R _{th(j-c)}	Junction to case			2	°C/W

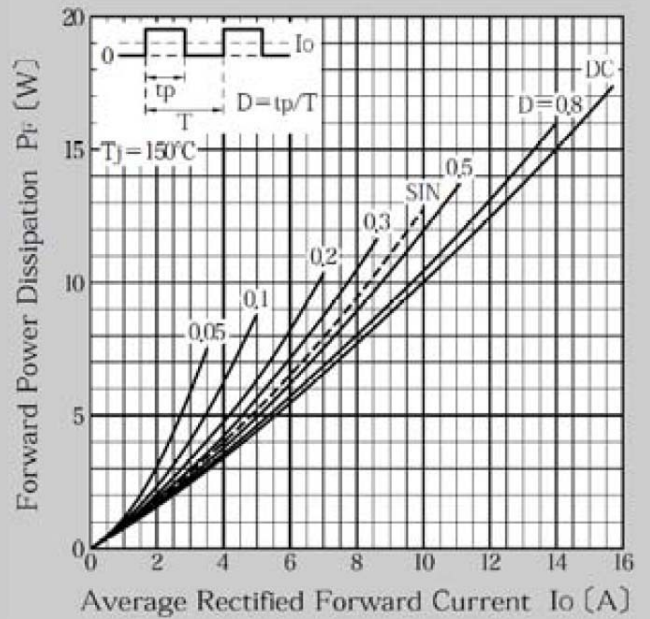
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

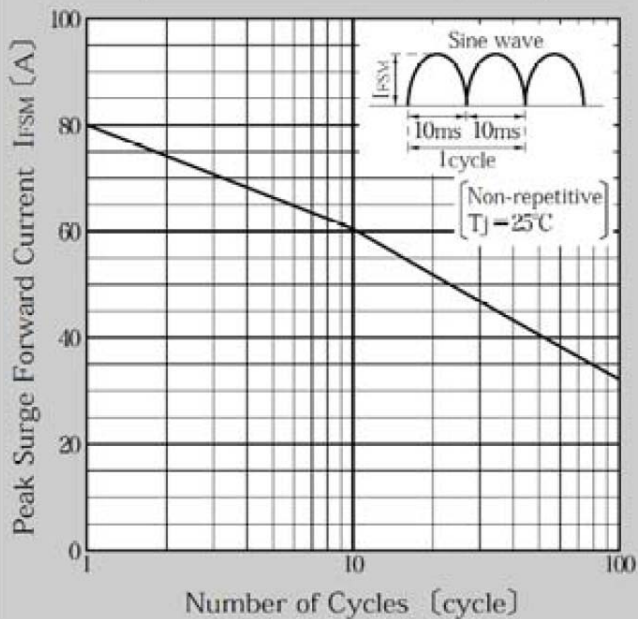
Forward Voltage



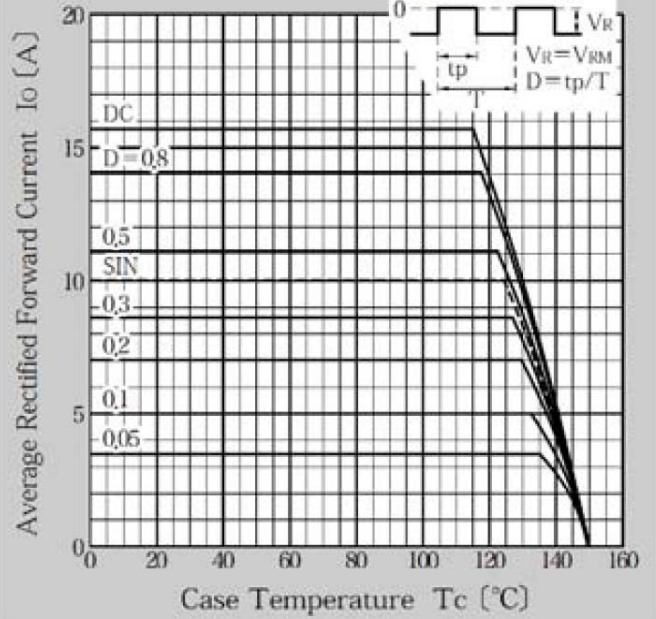
Forward Power Dissipation



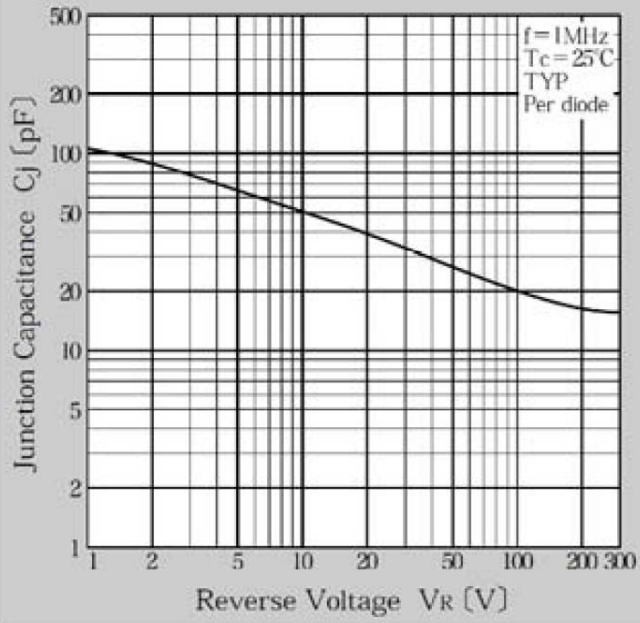
Peak Surge Forward Current Capability



Derating Curve T_c - I_o

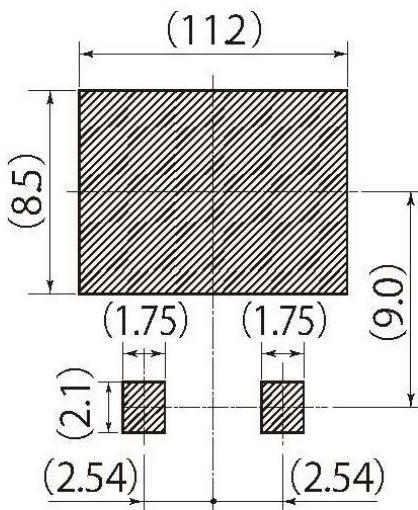
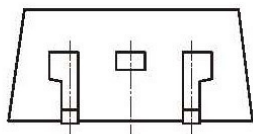
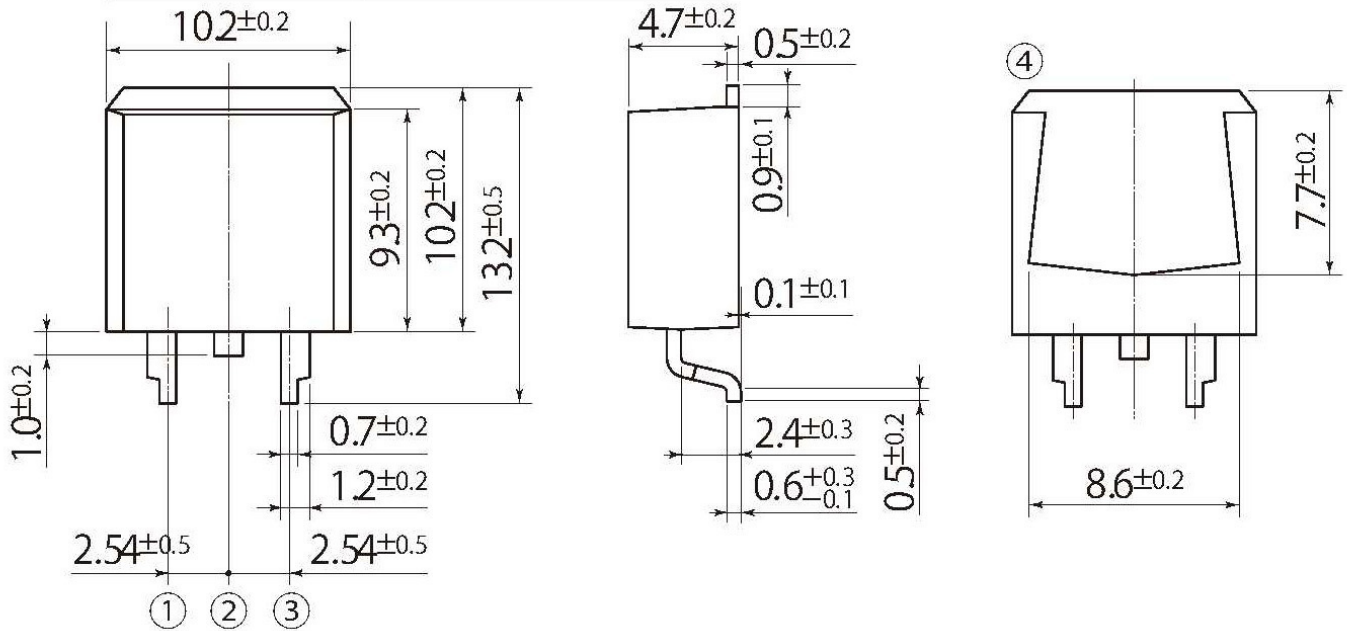


Junction Capacitance



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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