

D25FD60V
General Rectifying Diodes
600V, 25A

Feature

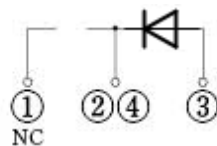
- SMD
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

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



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink, Tc=113°C	25	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	450	A
Surge forward current	I _{FSM1}	tp=1ms, sine wave, Non-repetitive, peak value, Tj=25°C	1423	A
Current squared time	I ² t	1ms≤tp<10ms, Tj=25°C	1013	A ² s

※ :See the original Specifications

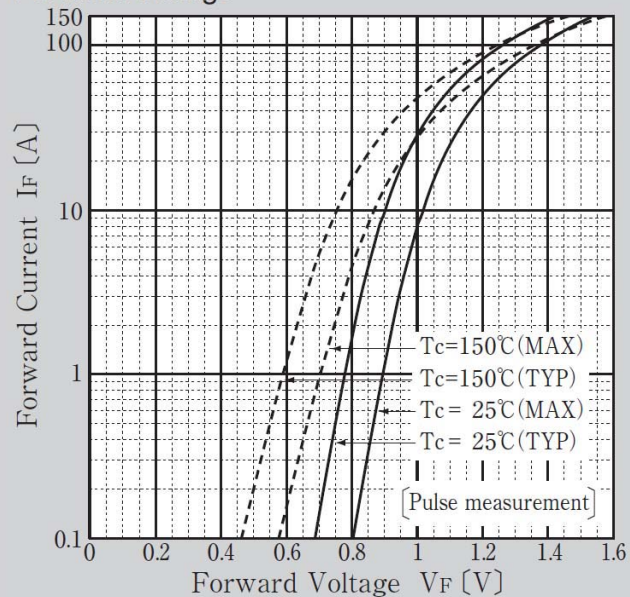
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=25A, Pulse measurement			1.1	V
Reverse current	I_R	VR=600V, Pulse measurement			10	μA
Thermal resistance	Rth(j-c)	Junction to case, with heatsink			1.3	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			65	°C/W

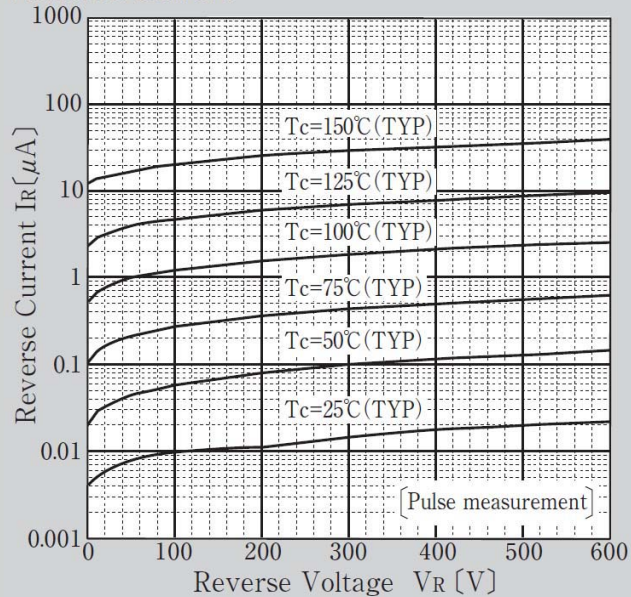
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

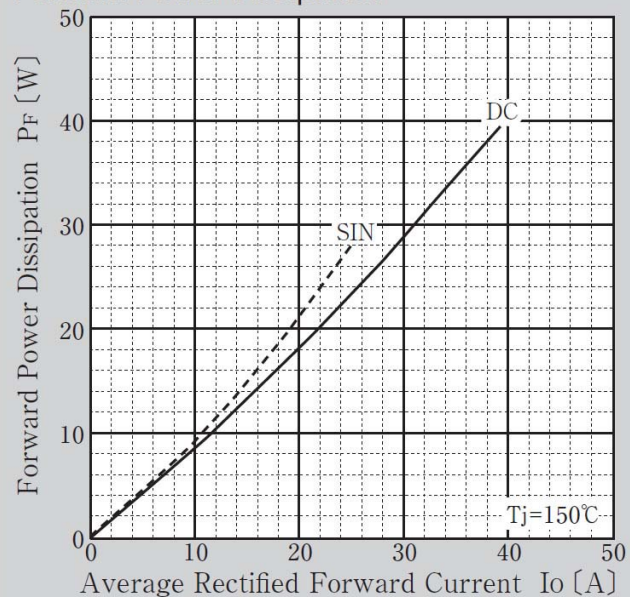
Forward Voltage



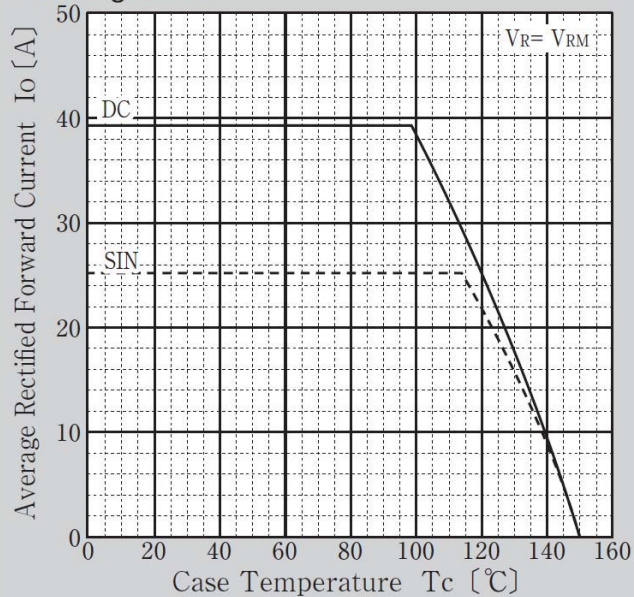
Reverse Current



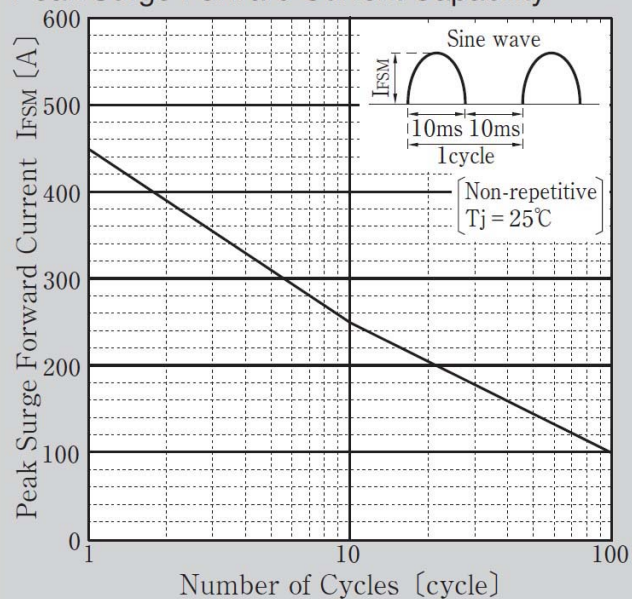
Forward Power Dissipation



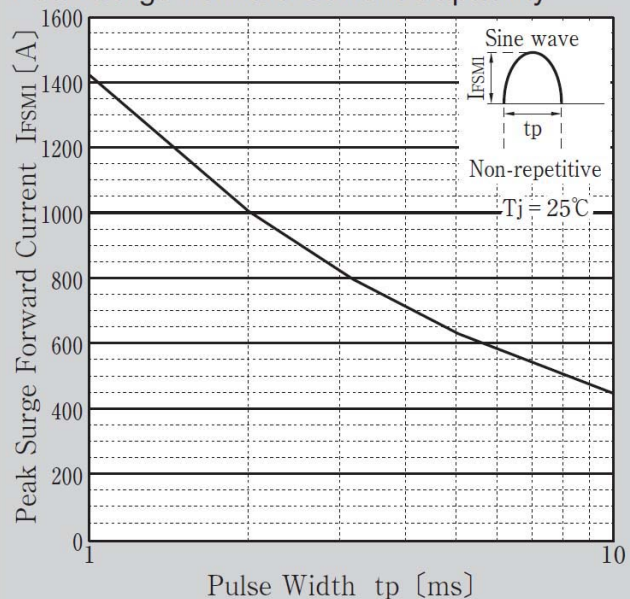
Derating Curve



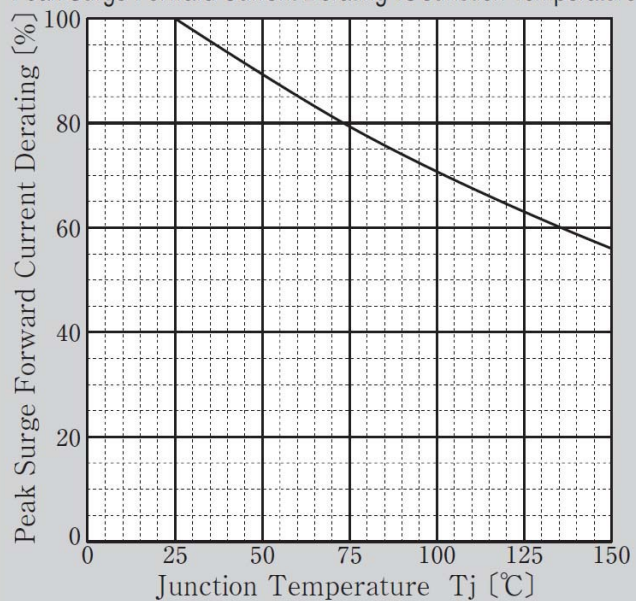
Peak Surge Forward Current Capability



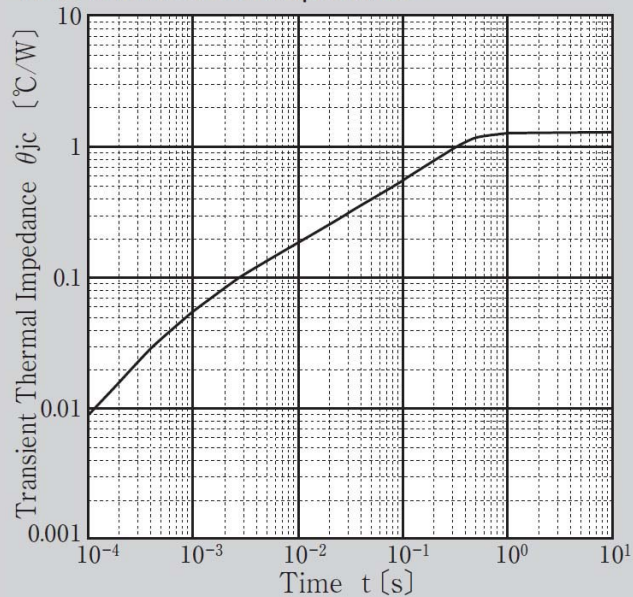
Peak Surge Forward Current Capability



Peak Surge Forward Current Derating vs Junction Temperature

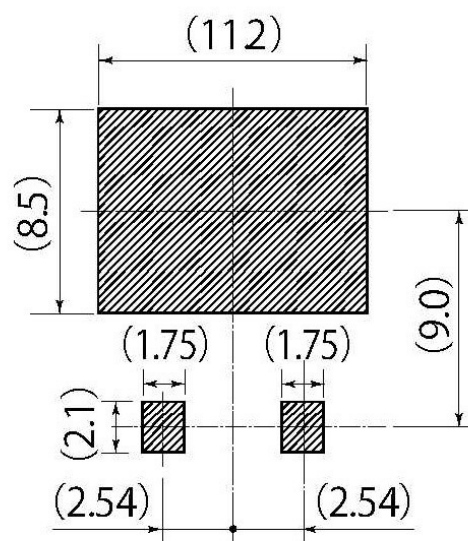
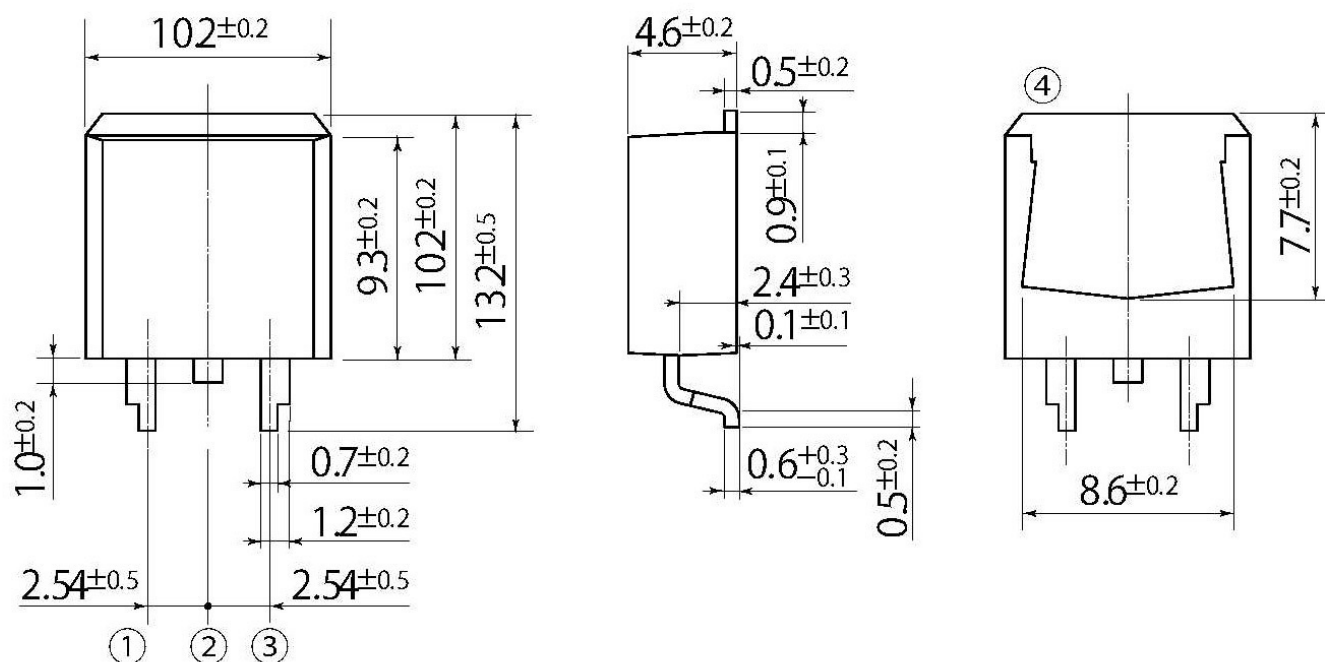


Transient Thermal Impedance



H2

JEDEC Code	—
JEITA Code	SC-83 similar
House Name	FD



Referential Soldering Pad

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

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