

D1F60
General Rectifying Diodes
600V, 1.0A

Feature

- Small SMD
- Available for automotive use
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 1F
Package (JEDEC Code): DO-214AC



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	T _{stg}		-55 to 150	°C
Junction temperature	T _j		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tl=123°C	1	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On alumina substrate, Ta=25°C ※	1	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	0.75	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	25	A
Current squared time	I ² t	1ms≤tp<10ms, Tj=25°C	2.5	A ² s

※ :See the original Specifications

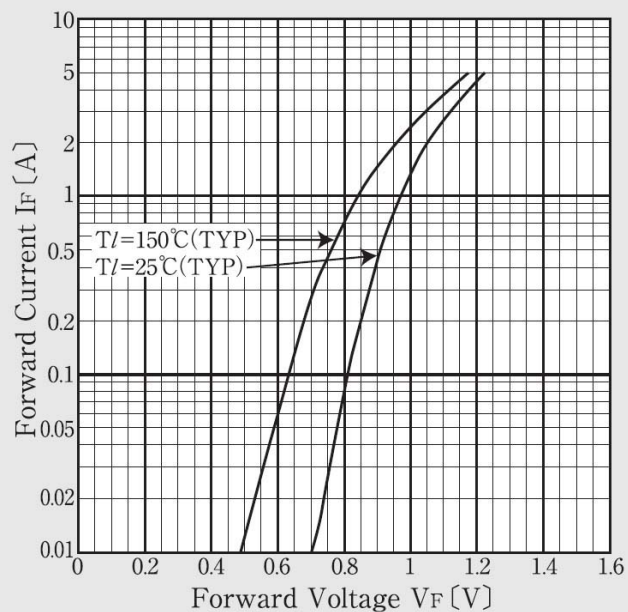
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1A, Pulse measurement			1.1	V
Reverse current	I_R	VR=600V, Pulse measurement			10	μA
Total capacitance	C_t	f=1MHz, VR=10V		4.7		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead			23	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On alumina substrate ※			108	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			157	°C/W

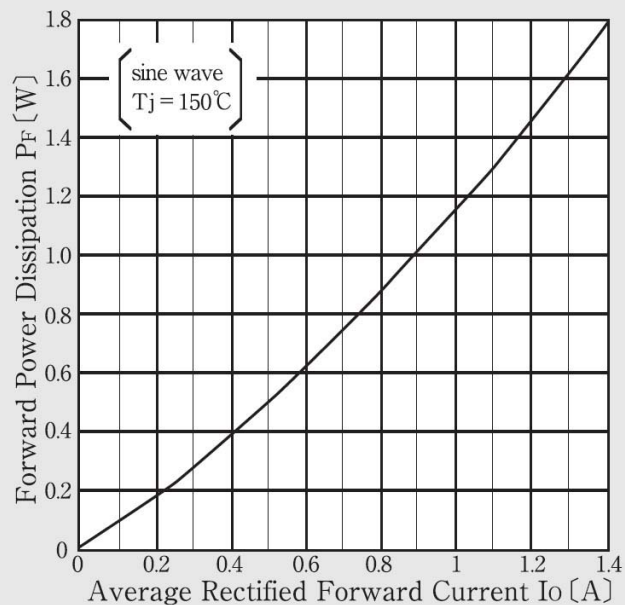
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

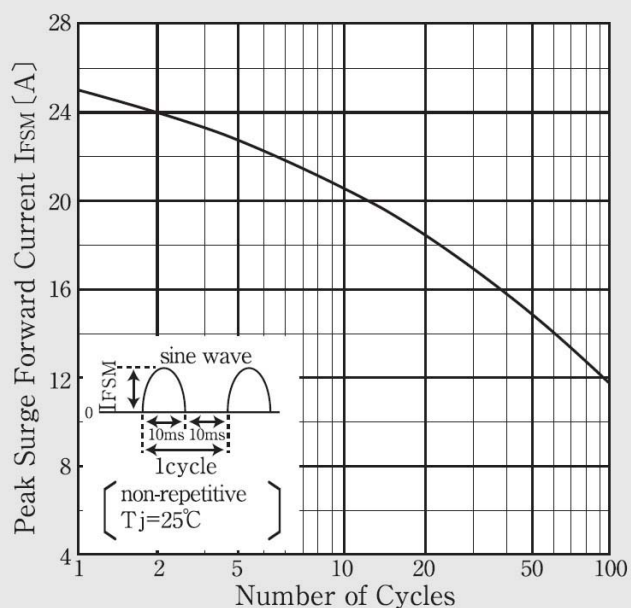
Forward Voltage



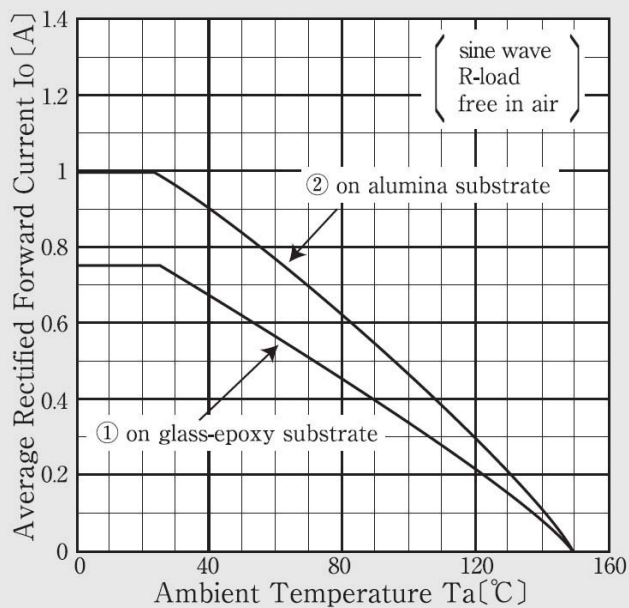
Forward Power Dissipation



Peak Surge Forward Current Capability



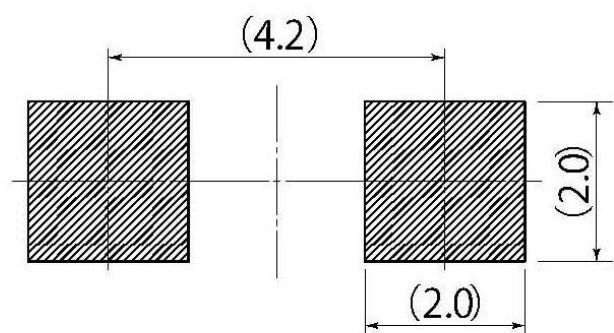
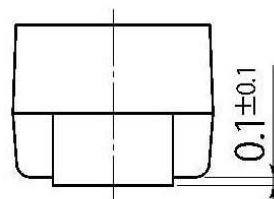
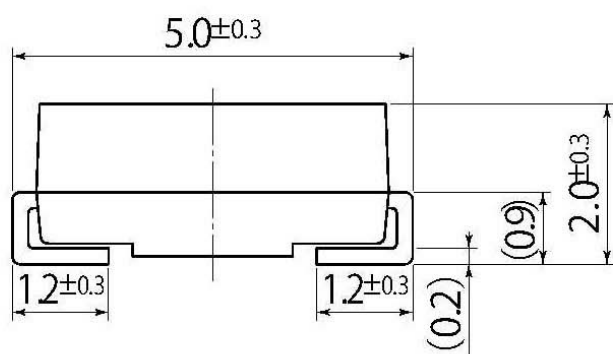
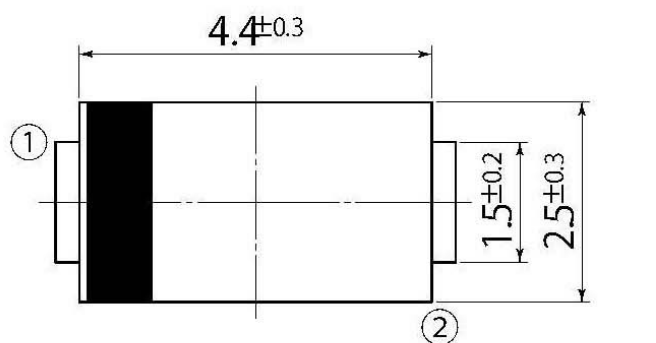
Derating Curve



	①	②
soldering land	2mm [□]	2mm [□]
conductor layer	35μm	20μm
substrate thickness	—	0.64 t

B3

JEDEC Code	DO-214AC
JEITA Code	—
House Name	1F, CF



Referential Soldering Pad

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

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