

# **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)

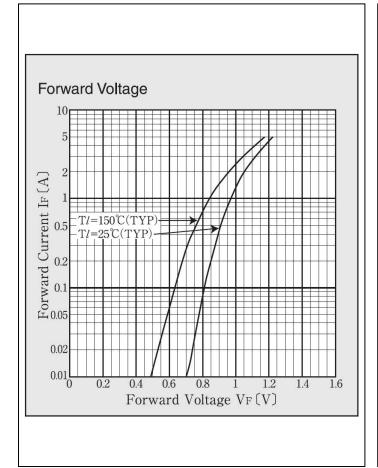
Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		600	V
Average forward current	I <sub>F</sub> (AV)	50Hz sine wave, Resistance load, Tl=123°C	1	Α
Average forward current	I <sub>F</sub>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

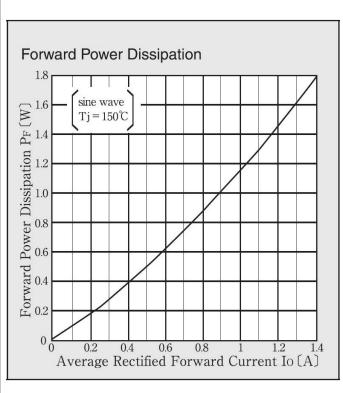
**※** ∶See the original Specifications

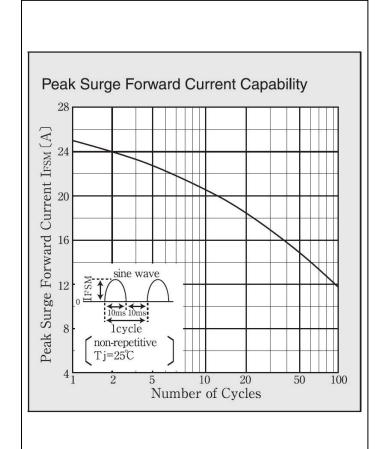
# **Electrical Characteristics** (unless otherwise specified: Tl=25°C)

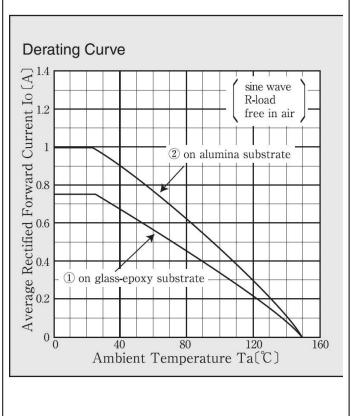
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	Offic
Forward voltage	$V_{F}$	IF=1A, Pulse measurement			1.1	٧
Reverse current	I <sub>R</sub>	VR=600V, Pulse measurement			10	μΑ
Total capacitance	Ct	f=1MHz, VR=10V		4.7		pF
Thermal resistance	Rth(j-l)	Junction to lead			23	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate ※			108	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate *			157	°C/W

# CHARACTERISTIC DIAGRAMS









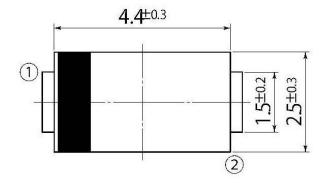
	1	2
soldering land	2mm□	$2$ mm $^{\square}$
conductor layer	35 µ m	$20\mu\mathrm{m}$
substrate thickness		0.64 t

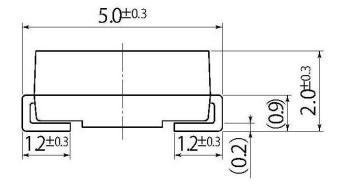
# unit:mm

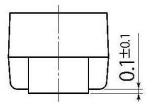
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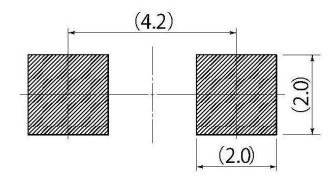
**B**3

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









Referential Soldering Pad

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

#### **Notes**

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#### [Special applications]

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#### [Specific applications]

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