

# D3FK60

Fast Recovery Diodes  
600V, 2.1A

## Feature

- Small SMD
- High Voltage
- Low Noise
- Available for automotive use
- Pb free terminal
- RoHS:Yes

## OUTLINE

Package (House Name): 2F



## Equivalent circuit



## Absolute Maximum Ratings (unless otherwise specified : $T_{l}=25^{\circ}\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 150	$^{\circ}\text{C}$
Junction temperature	$T_j$		-55 to 150	$^{\circ}\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		600	V
Average forward current	$I_F(\text{AV})$	50Hz sine wave, Resistance load, $T_l=93^{\circ}\text{C}$	2.1	A
Average forward current	$I_F(\text{AV})$	50Hz sine wave, Resistance load, On alumina substrate, $T_a=25^{\circ}\text{C}$	1.5	A
Average forward current	$I_F(\text{AV})$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=25^{\circ}\text{C}$	1.1	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle, Peak value, $T_j=25^{\circ}\text{C}$	120	A
Current squared time	$I^2t$	$1\text{ms} \leq t_p < 10\text{ms}$ , $T_j=25^{\circ}\text{C}$	72	$\text{A}^2\text{s}$

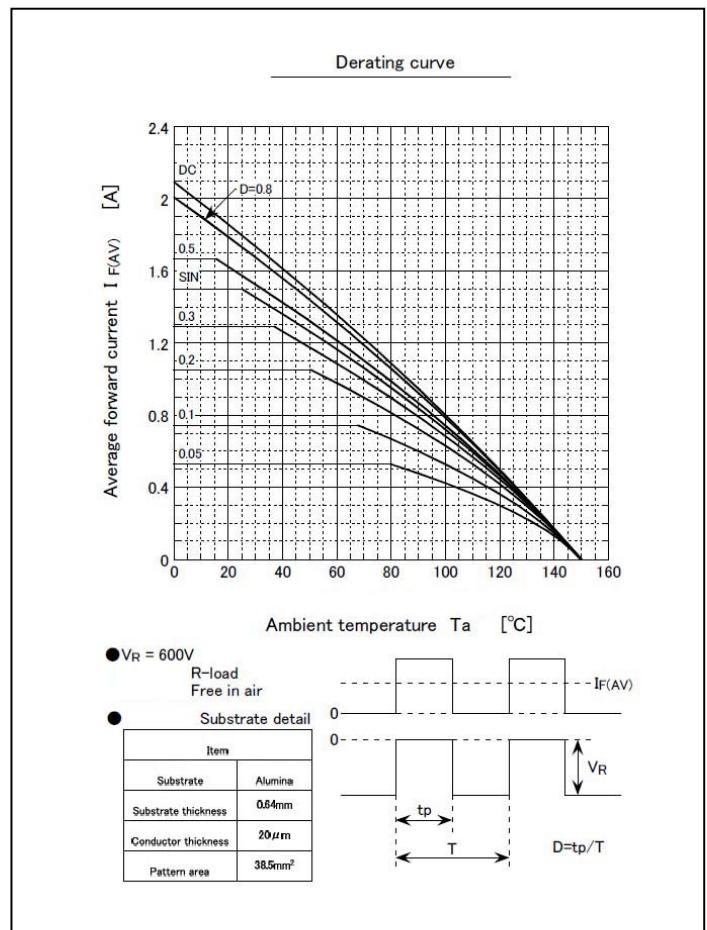
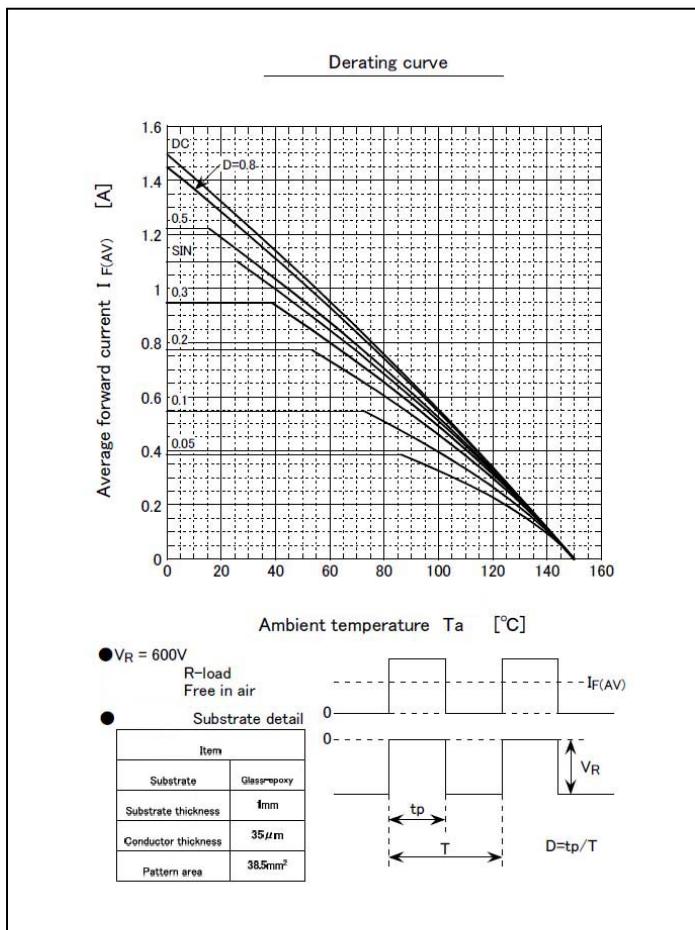
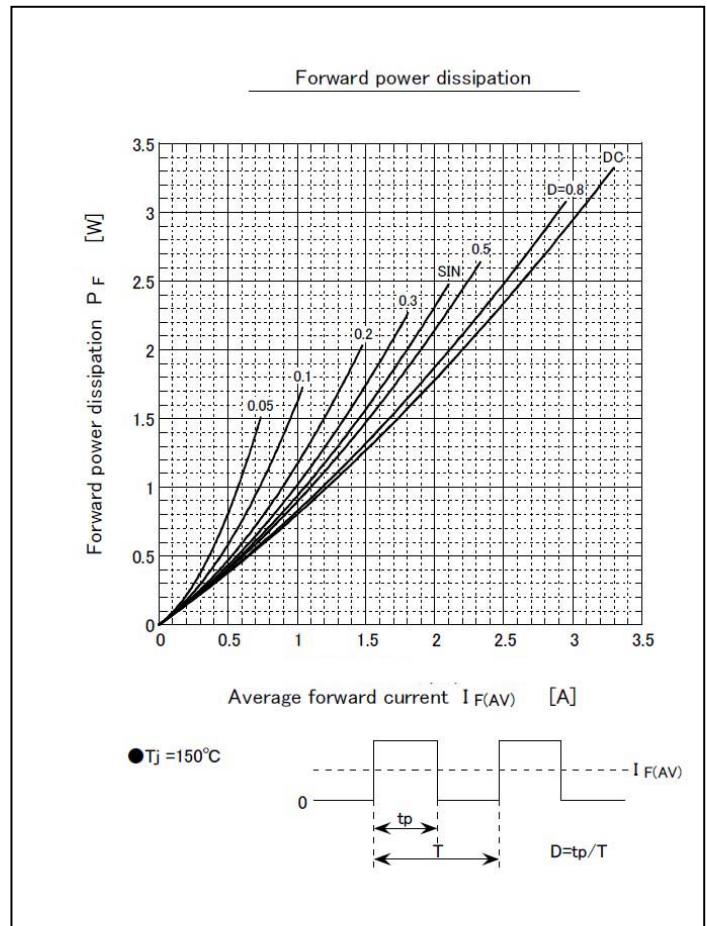
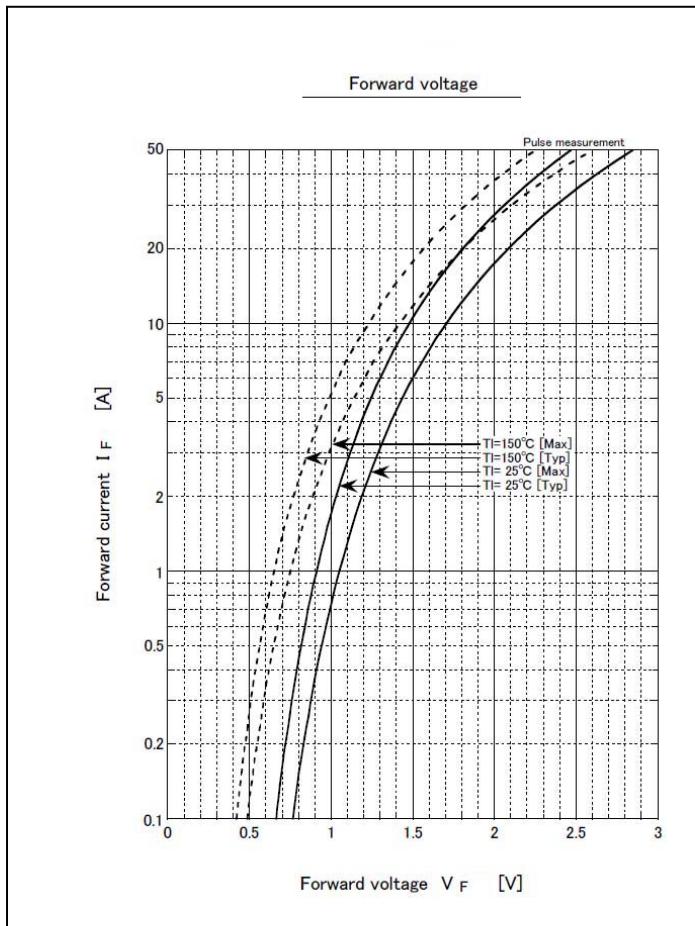
※ :See the original Specifications

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

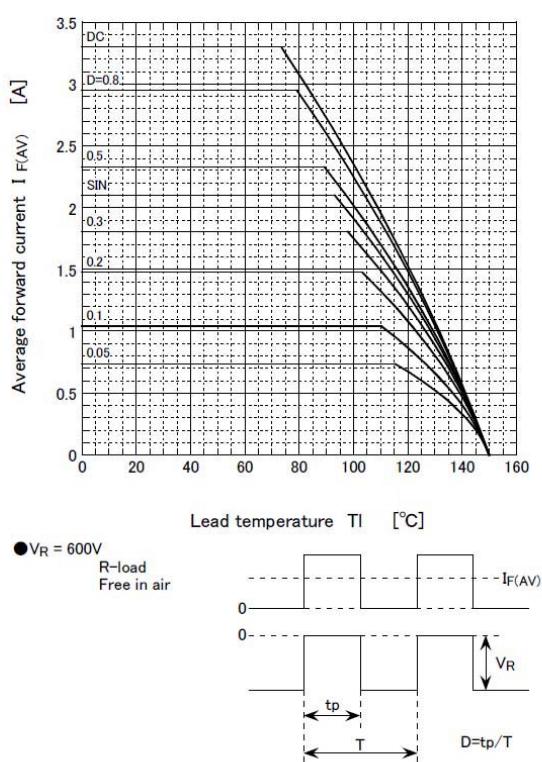
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=2.1A, Pulse measurement			1.2	V
Reverse current	$I_R$	VR=600V, Pulse measurement			10	$\mu A$
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR			75	ns
Total capacitance	Ct	f=1MHz, VR=10V		37		pF
Thermal resistance	Rth(j-l)	Junction to lead			23	$^{\circ}C/W$
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate			80	$^{\circ}C/W$
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			115	$^{\circ}C/W$

※ :See the original Specifications

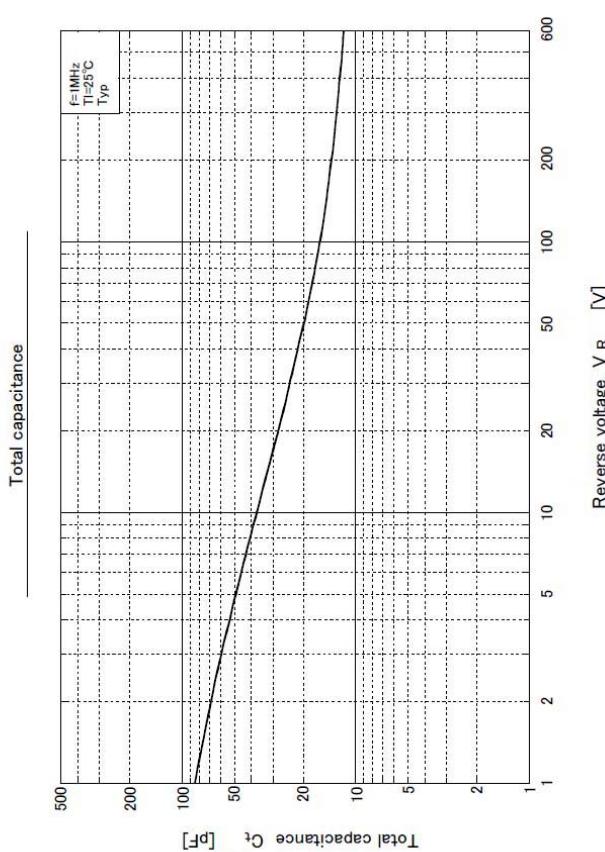
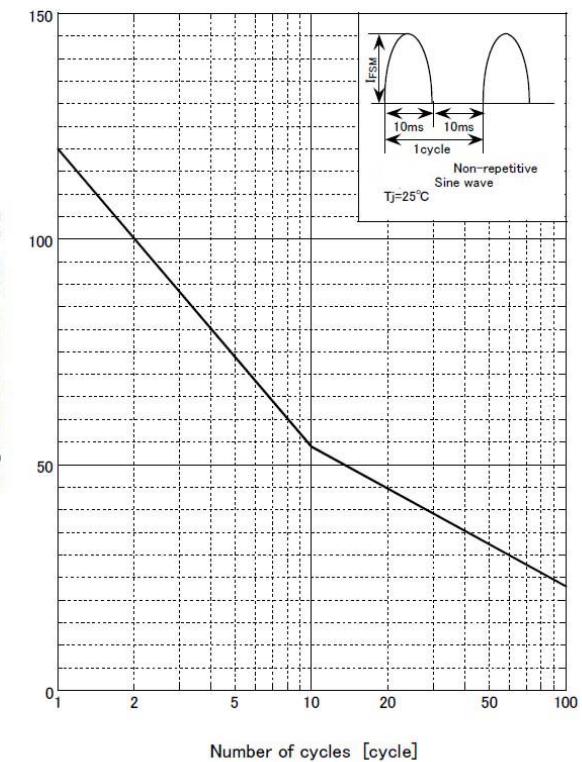
## CHARACTERISTIC DIAGRAMS



Derating curve



Surge forward current capability



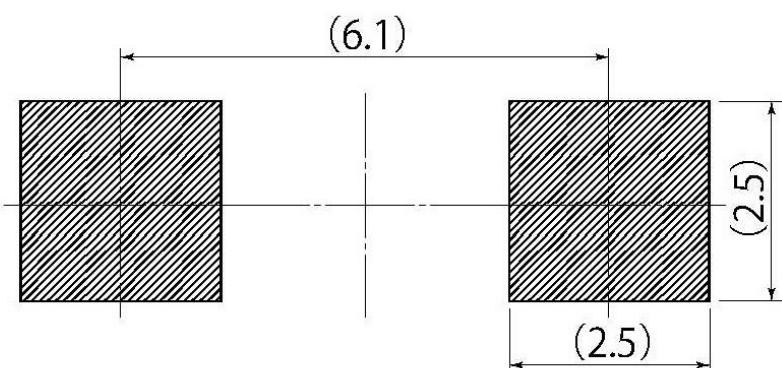
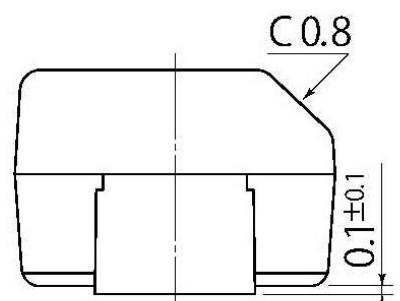
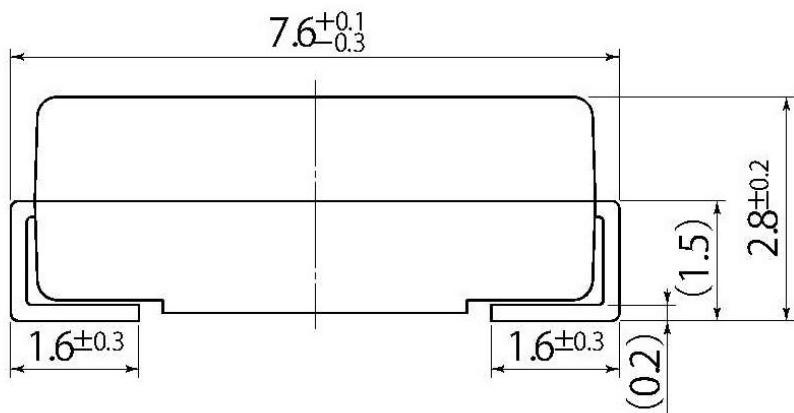
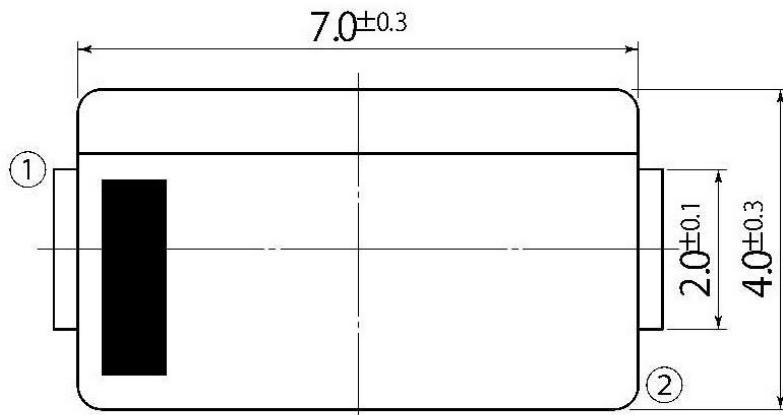
## Outline Dimensions

unit:mm

scale: 10/1

B9

JEDEC Code	—
JEITA Code	—
House Name	2F



Referential Soldering Pad

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

## Notes

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