

# D3FS4A

## Schottky Barrier Diodes

40V, 2.6A

### Feature

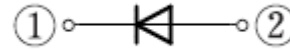
- Small SMD
- High Recovery Speed
- Low  $V_F$
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): 2F



### Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 150	°C
Junction temperature	$T_j$		-55 to 150	°C
Repetitive peak reverse voltage	$V_{RRM}$		40	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On alumina substrate, $T_a=34^\circ\text{C}$ *	2.6	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=30^\circ\text{C}$ *	1.9	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=125^\circ\text{C}$	150	A
Repetitive peak surge reverse power	$P_{RRSM}$	Pulse width 10 $\mu\text{s}$ , $T_j=25^\circ\text{C}$	330	W

\* :See the original Specifications

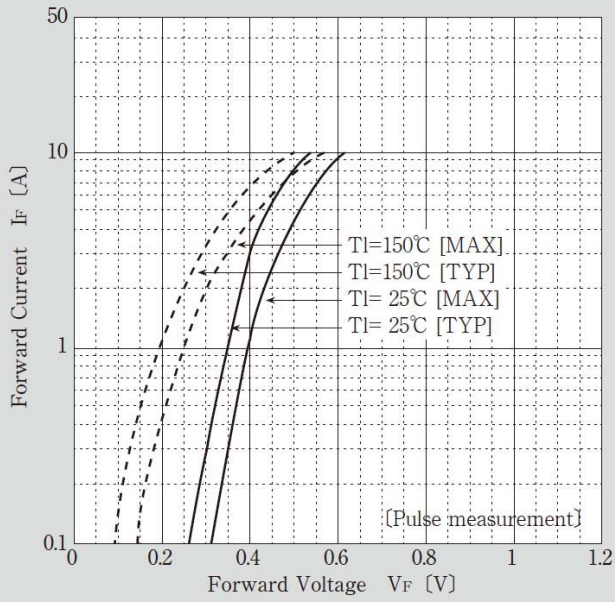
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=2.6A$ , Pulse measurement			0.45	V
Reverse current	$I_R$	$V_R=40V$ , Pulse measurement			5	mA
Total capacitance	$C_t$	$f=1MHz$ , $V_R=10V$		340		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 ※			80	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			115	°C/W

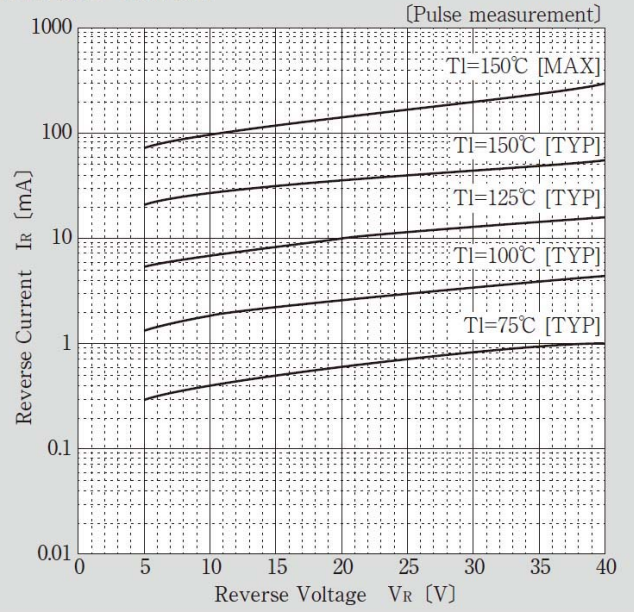
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

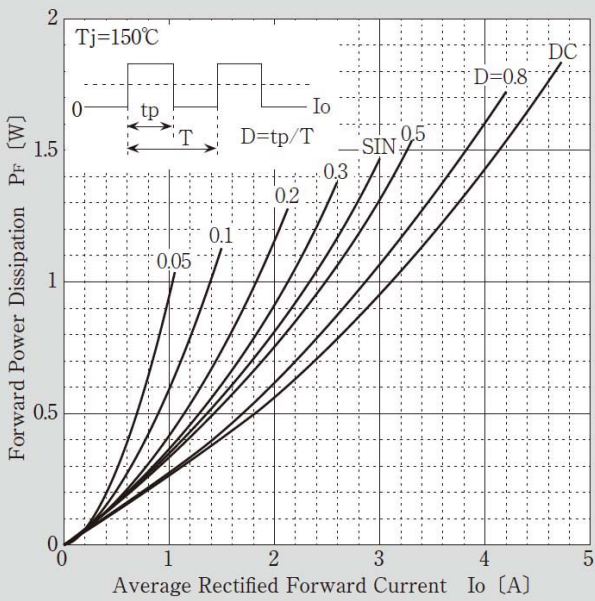
## Forward Voltage



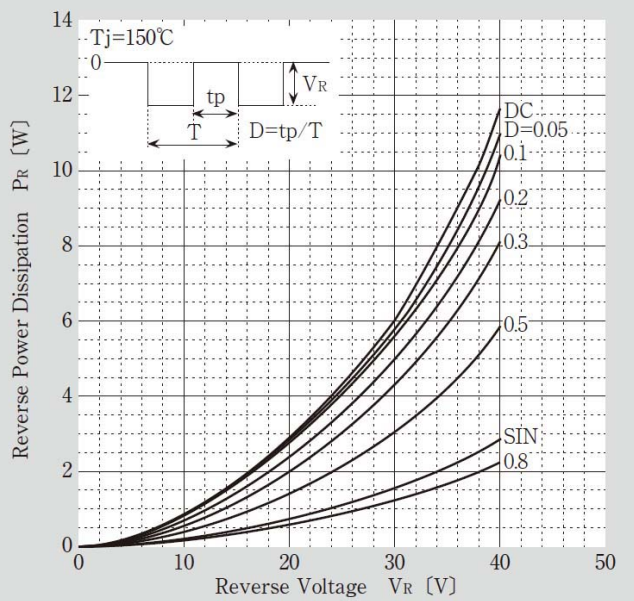
## Reverse Current



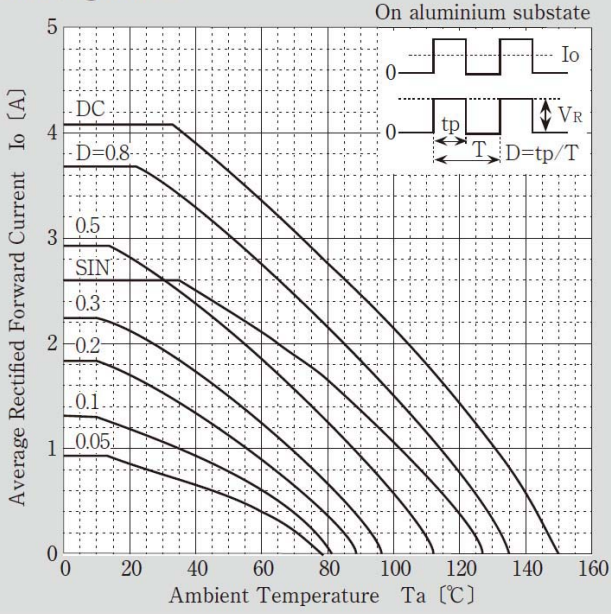
## Forward Power Dissipation



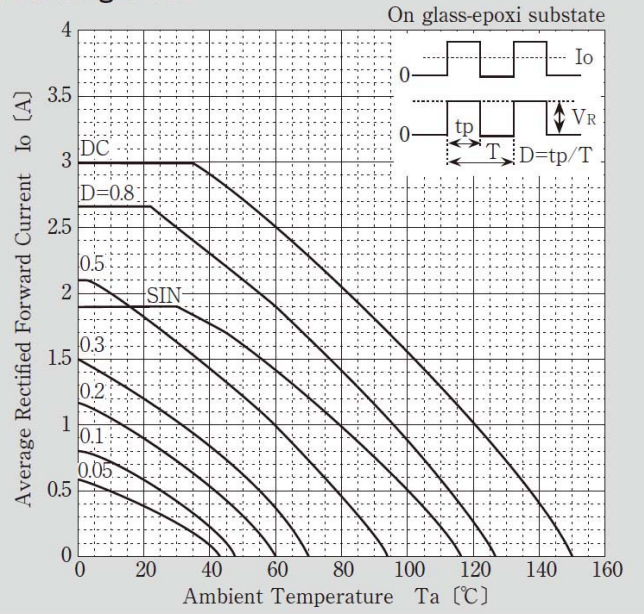
## Reverse Power Dissipation



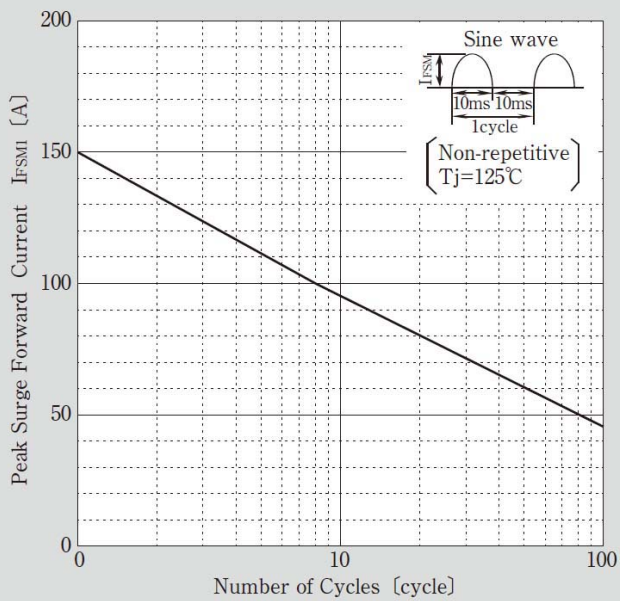
### Derating Curve



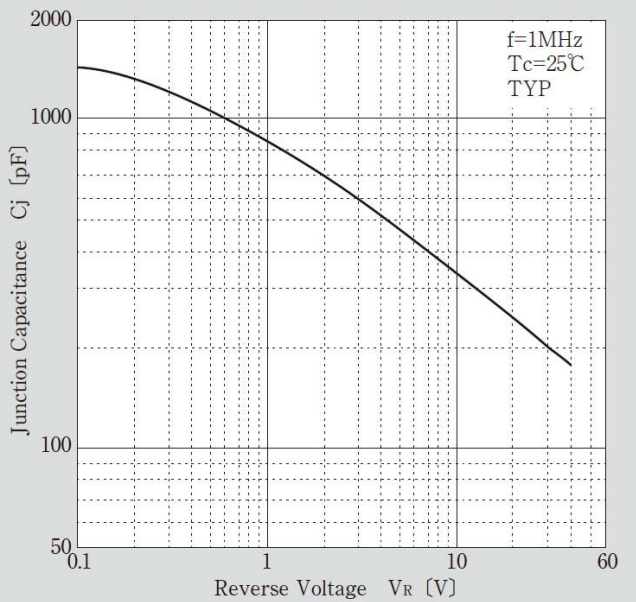
### Derating Curve



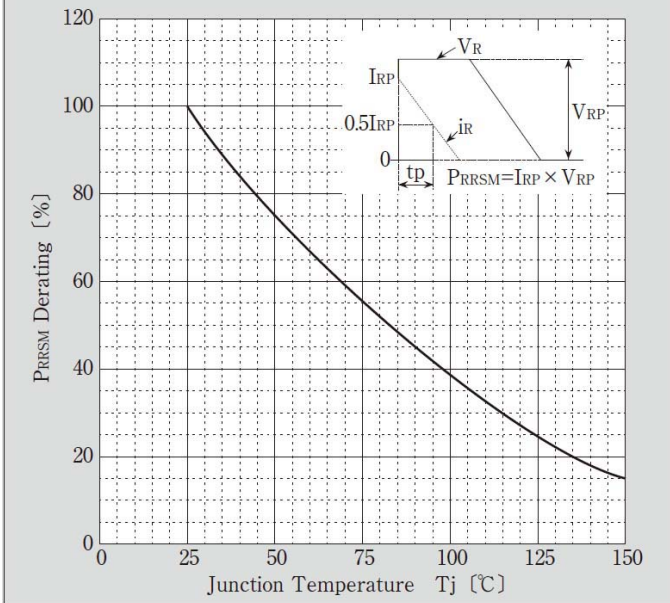
### Peak Surge Forward Capability



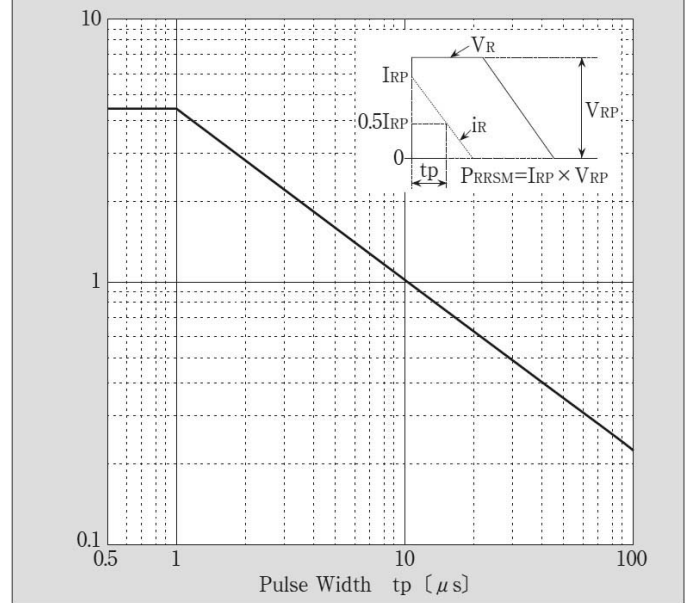
### Junction Capacitance



Repetitive Surge Reverse Power Derating Curve

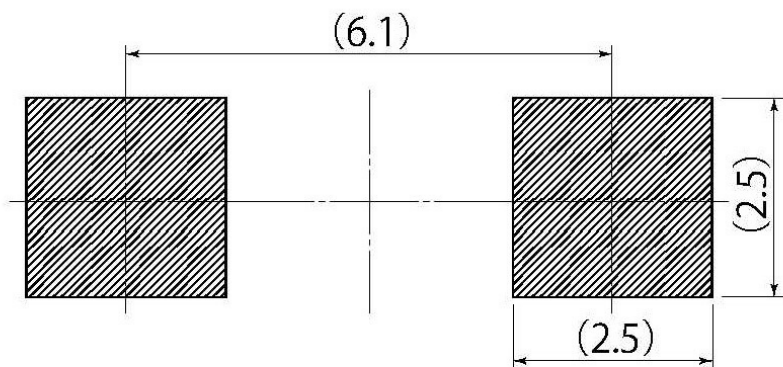
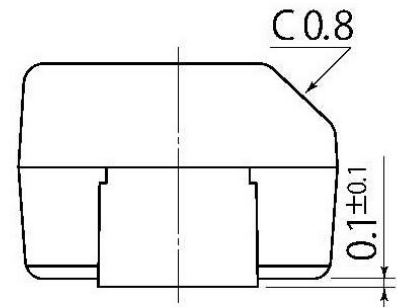
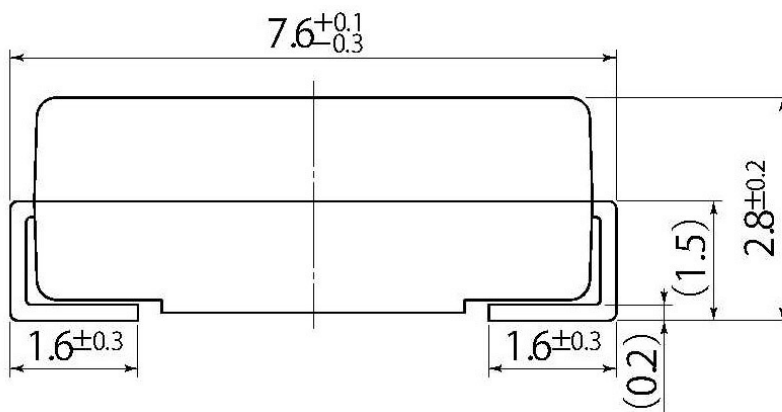
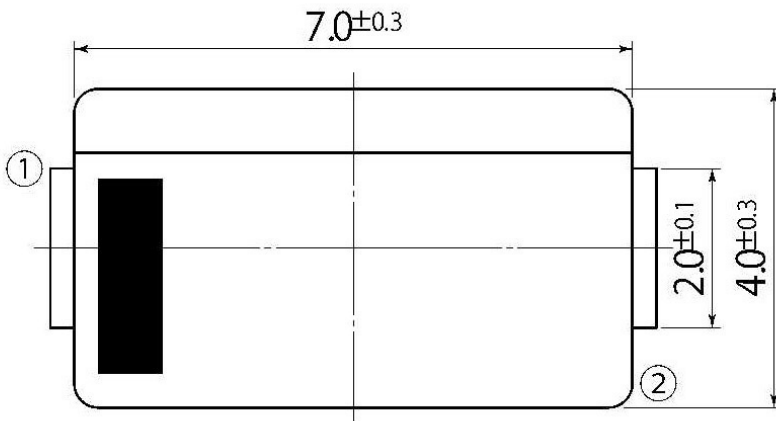


Repetitive Surge Reverse Power Capability



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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