

# D1FS6

## Schottky Barrier Diodes

60V, 1.1A

### Feature

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

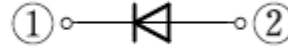
### OUTLINE

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 temperature	T <sub>stg</sub>		-55 to 150	°C
Junction temperature	T <sub>j</sub>		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		60	V
Repetitive peak surge reverse voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On alumina substrate, Ta=38°C	1.1	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=33°C	0.82	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T <sub>j</sub> =125°C	40	A
Repetitive peak surge reverse power	P <sub>RRSM</sub>	Pulse width 10μs, T <sub>j</sub> =25°C	60	W

※ :See the original Specifications

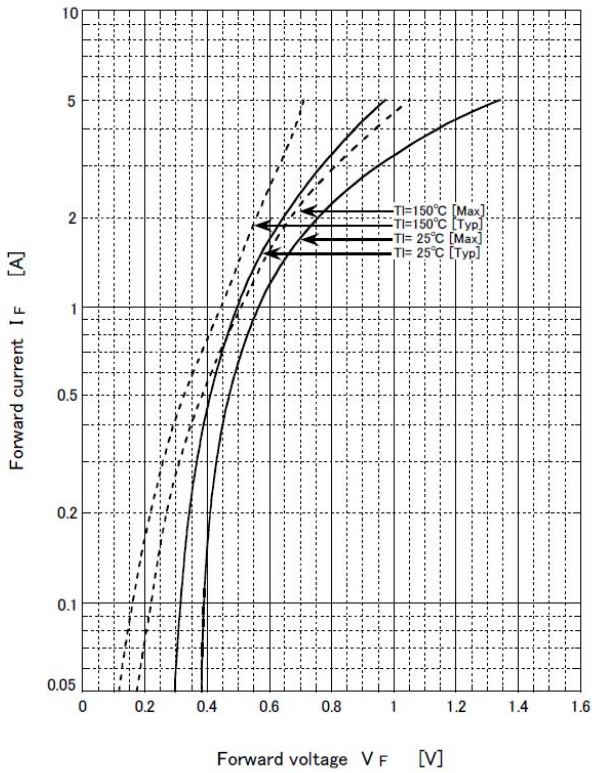
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=1.1A$ , Pulse measurement			0.58	V
Reverse current	$I_R$	$V_R=60V$ , Pulse measurement			1	mA
Total capacitance	$C_t$	$f=1MHz$ , $V_R=10V$		50		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

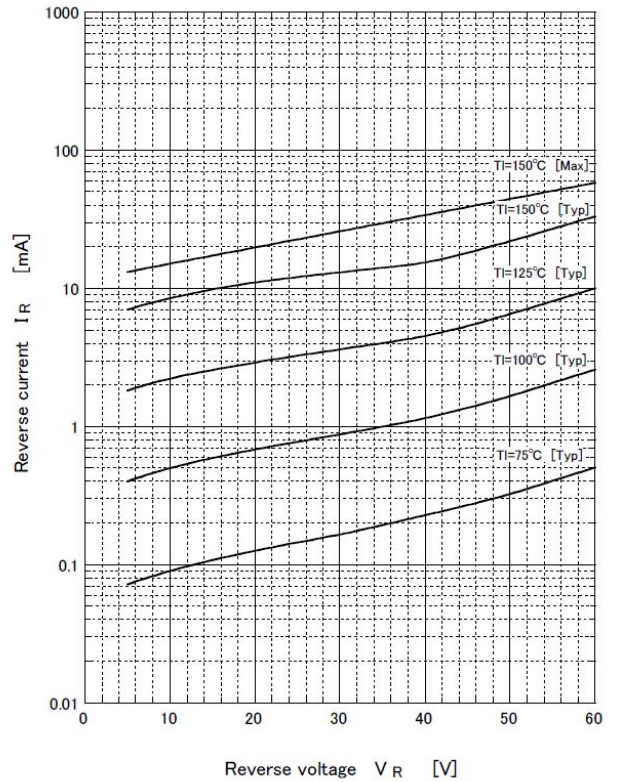
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

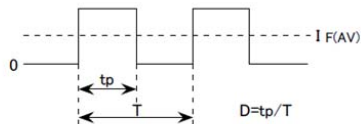
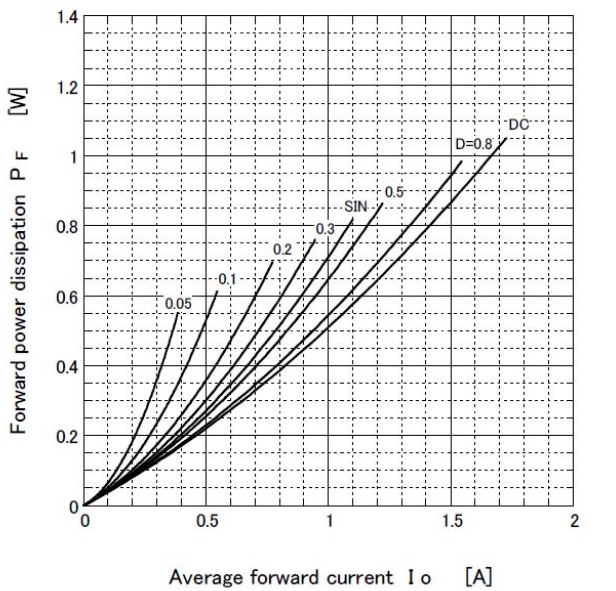
Forward voltage



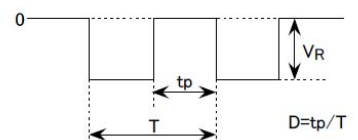
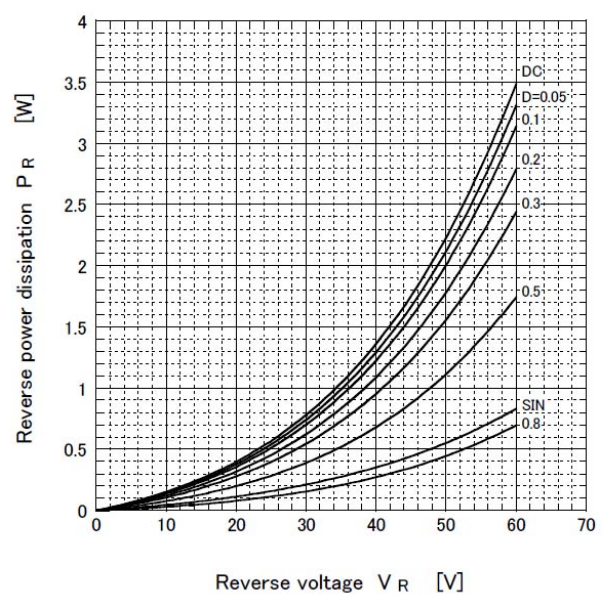
Reverse current



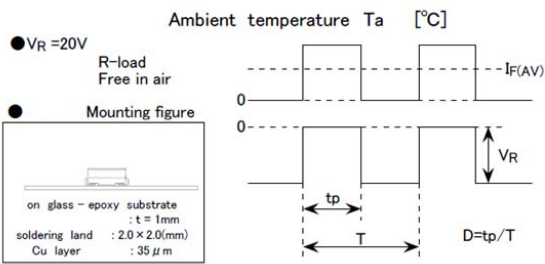
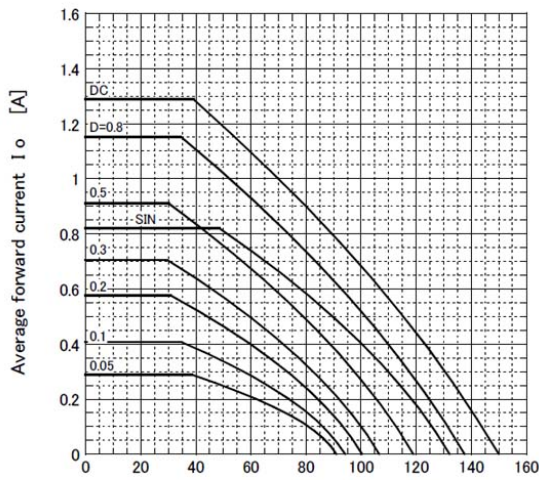
Forward power dissipation



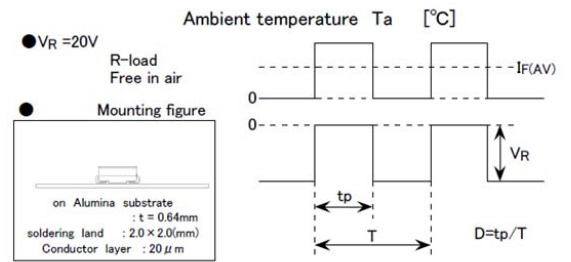
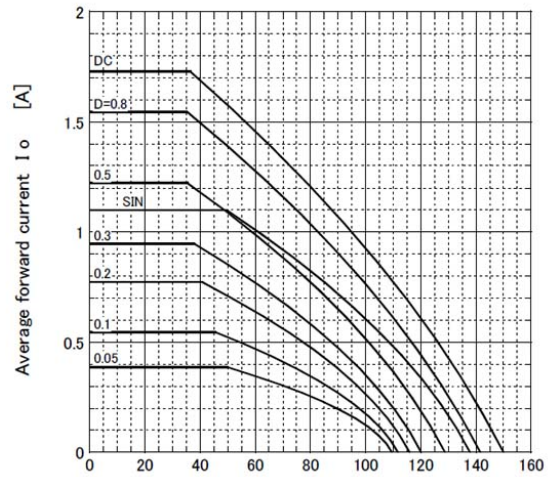
Reverse power dissipation



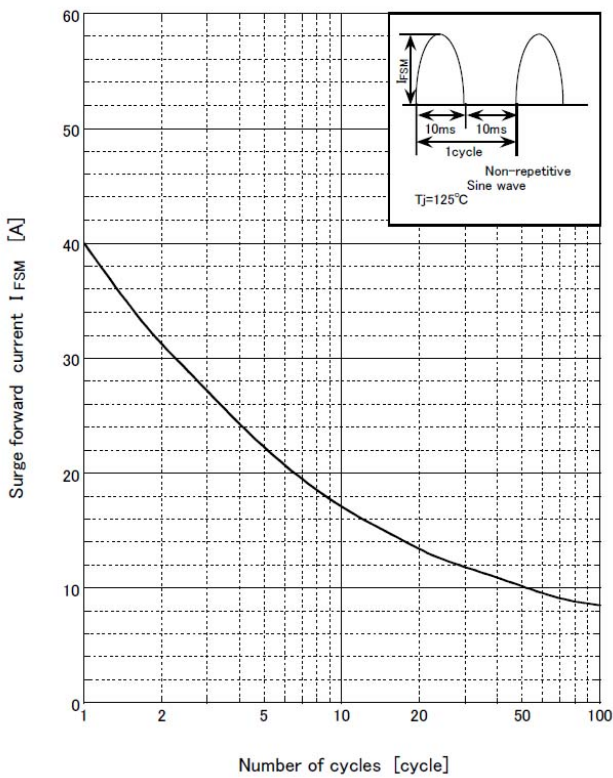
Derating curve



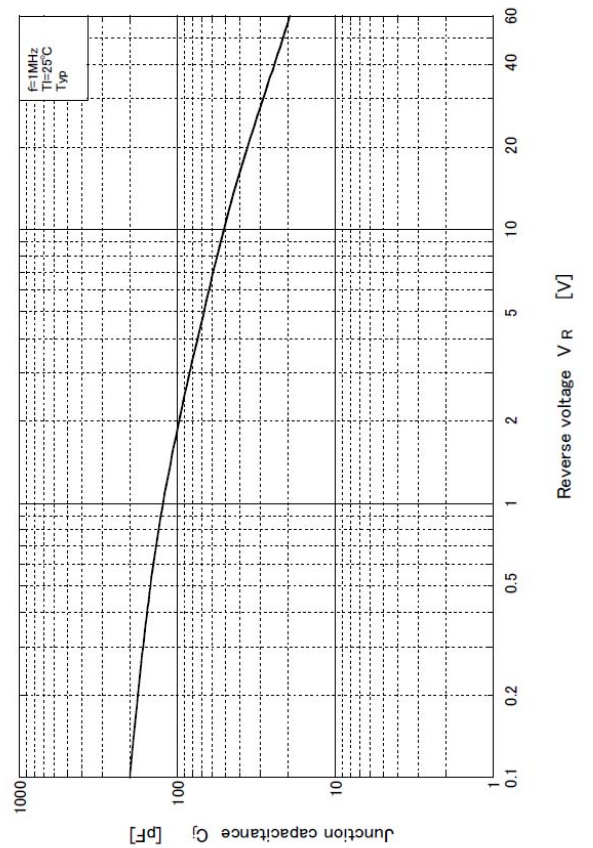
Derating curve



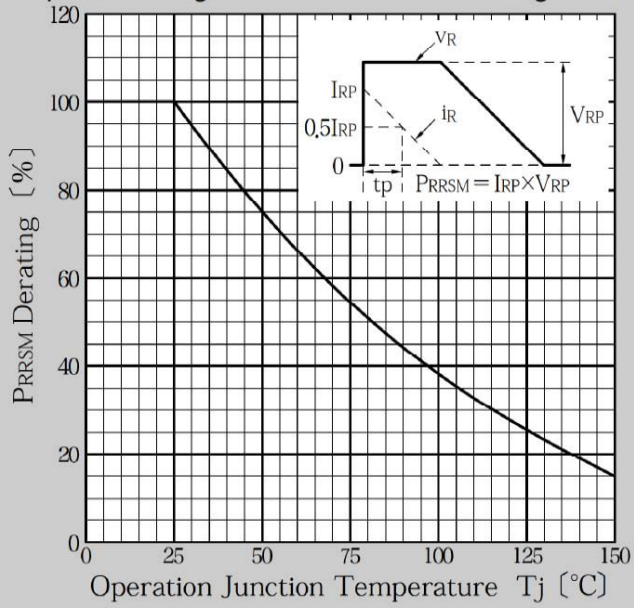
Surge forward current capability



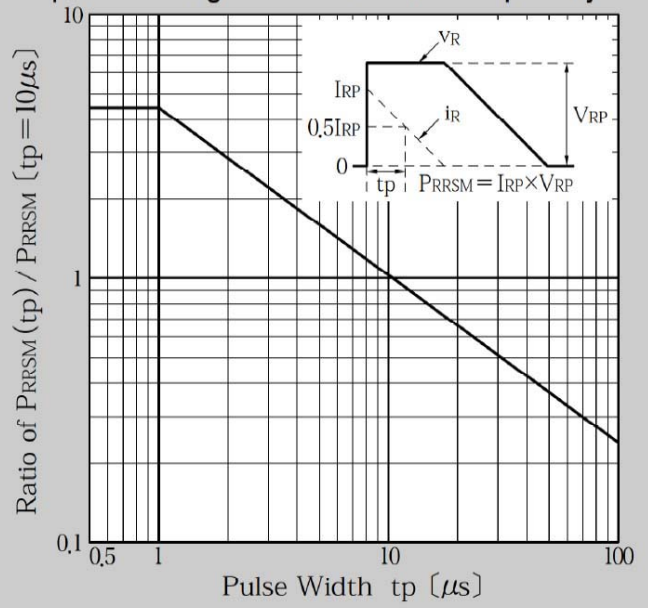
Junction capacitance



Repetitive Surge Reverse Power Derating Curve

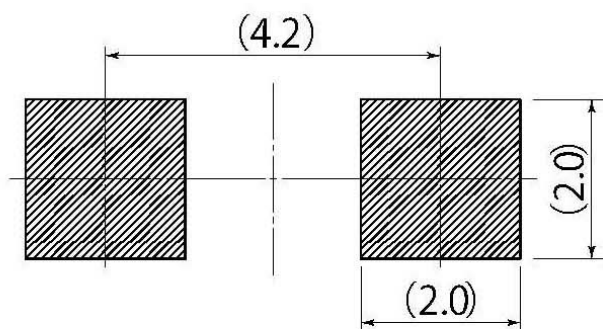
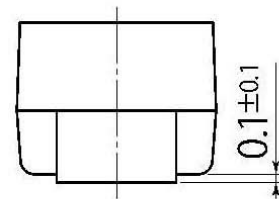
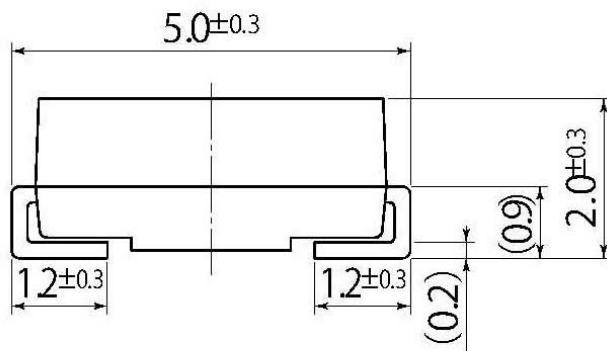
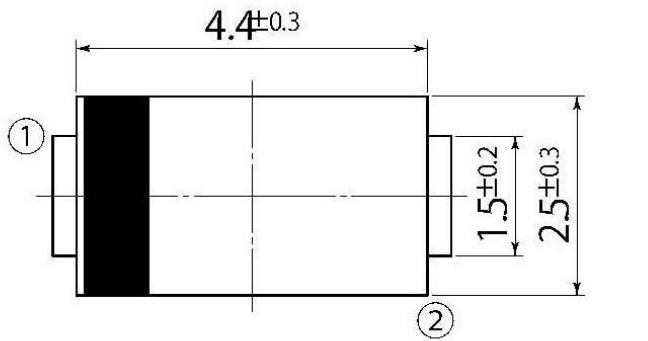


Repetitive Surge Reverse Power Capability



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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