

# D1FT6

## Schottky Barrier Diodes 60V, 2A

### Feature

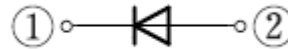
- Small SMD
- $T_j=175^{\circ}\text{C}$
- Ultra low  $I_R$
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

### OUTLINE

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



### Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	$T_{stg}$		-55 to 175	$^{\circ}\text{C}$
Junction temperature	$T_j$		-55 to 175	$^{\circ}\text{C}$
Repetitive peak reverse voltage	$V_{RRM}$		60	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, $T_l=141^{\circ}\text{C}$	2	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On alumina substrate, $T_a=25^{\circ}\text{C}$ ※	1.94	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, On glass-epoxy substrate, $T_a=25^{\circ}\text{C}$ ※	1.45	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^{\circ}\text{C}$	60	A

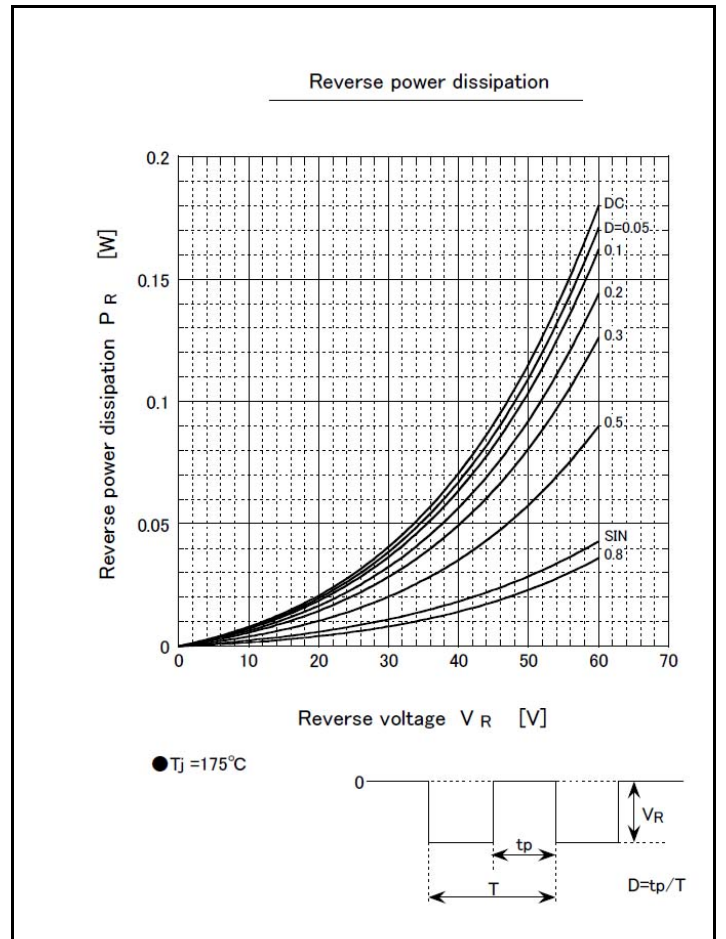
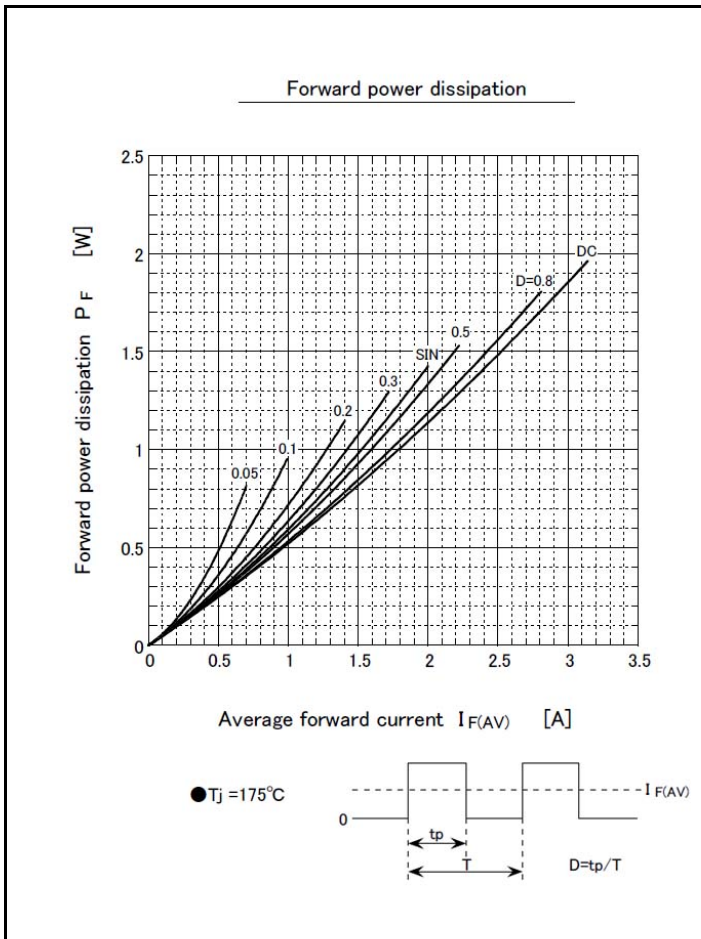
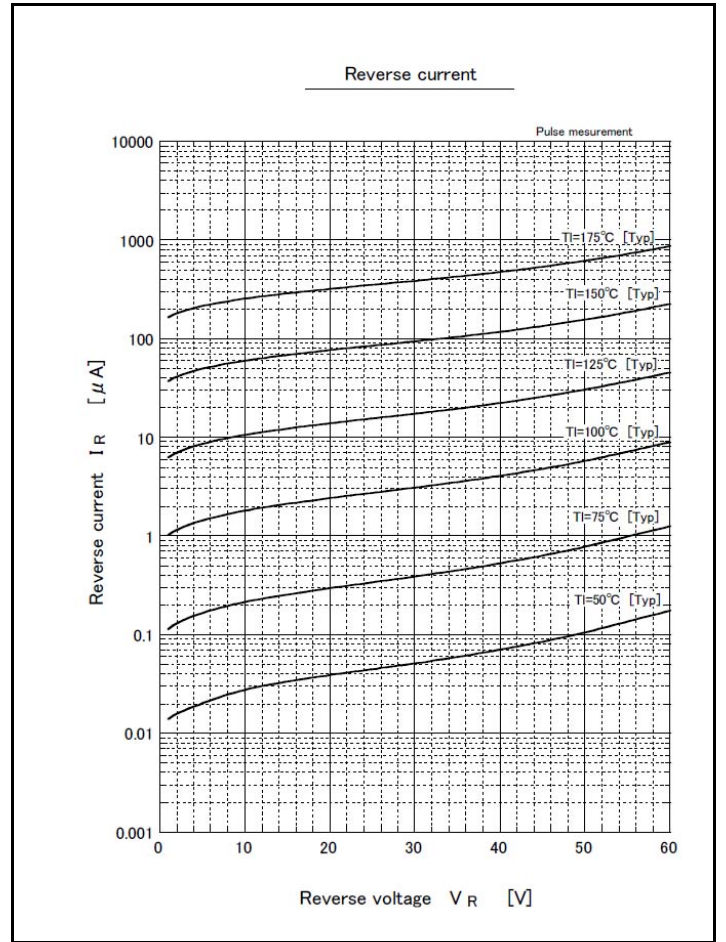
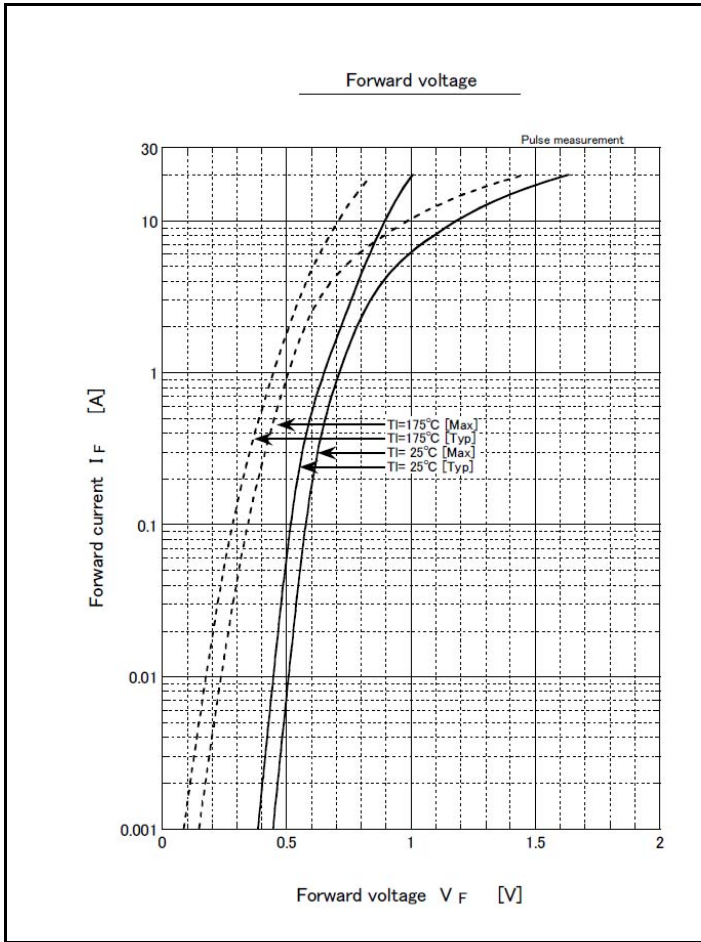
※ : See the original Specifications

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

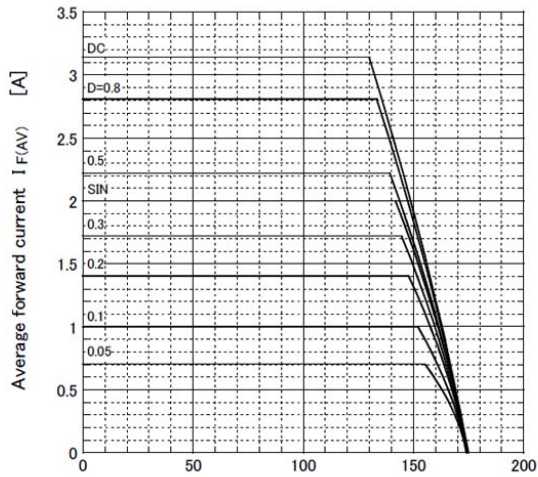
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=2.0A, Pulse measurement			0.78	V
Forward voltage	$V_F$	IF=1.0A, Pulse measurement			0.71	V
Reverse current	$I_R$	VR=60V, Pulse measurement			0.005	mA
Total capacitance	$C_t$	f=1MHz, VR=10V		53		pF
Thermal resistance	Rth(j-l)	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

※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

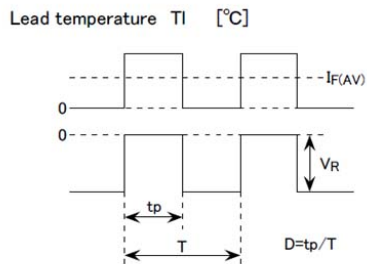


Derating curve

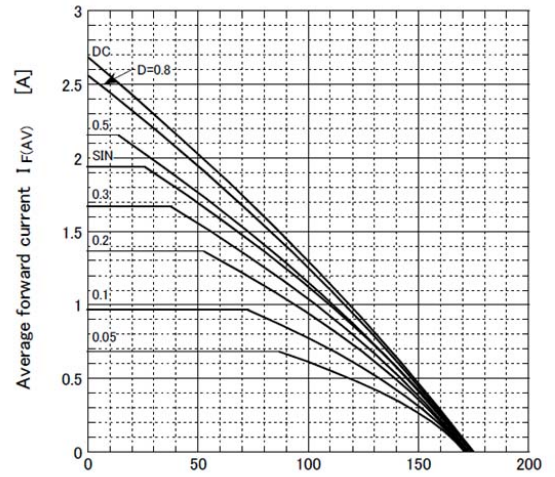


●  $V_R = 30V$

R-load  
Free in air

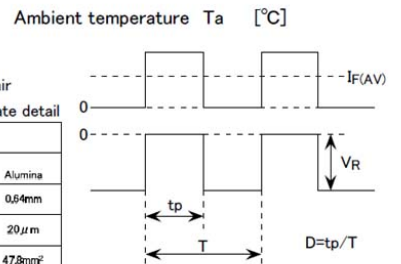


Derating curve



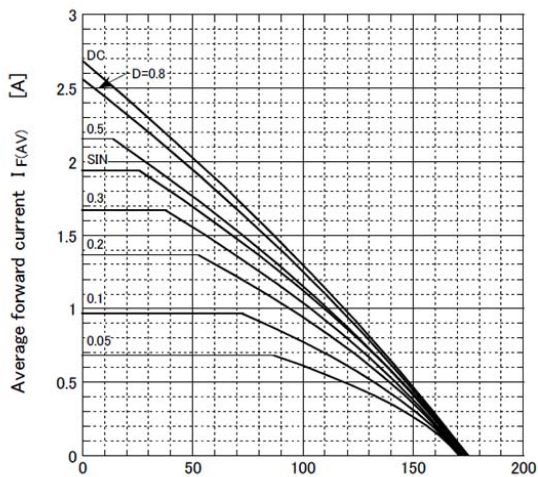
●  $V_R = 30V$

R-load  
Free in air



Substrate detail	
Substrate	Alumina
Substrate thickness	0.64mm
Conductor thickness	20 $\mu$ m
Pattern area	47.8mm <sup>2</sup>

Derating curve



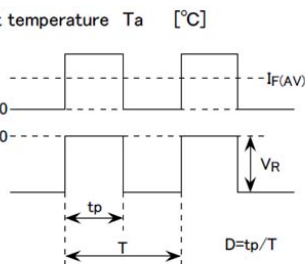
●  $V_R = 30V$

R-load  
Free in air

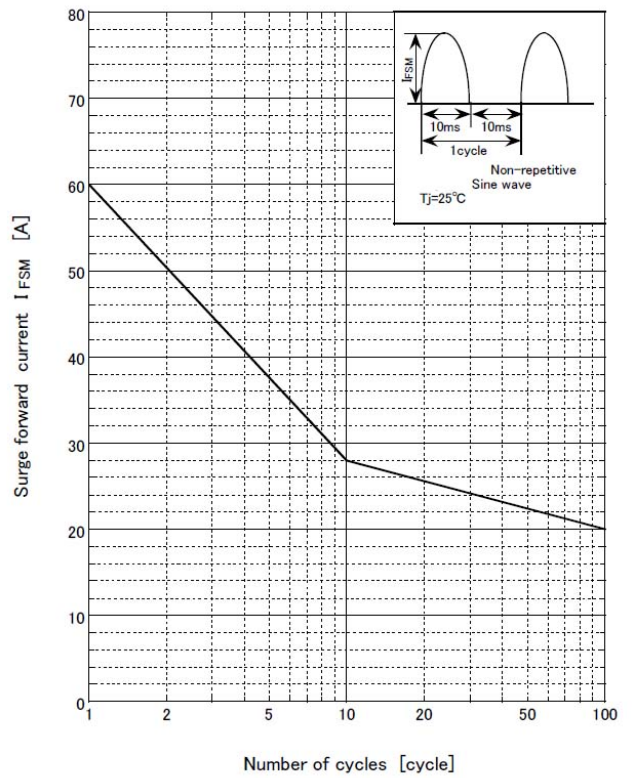
●

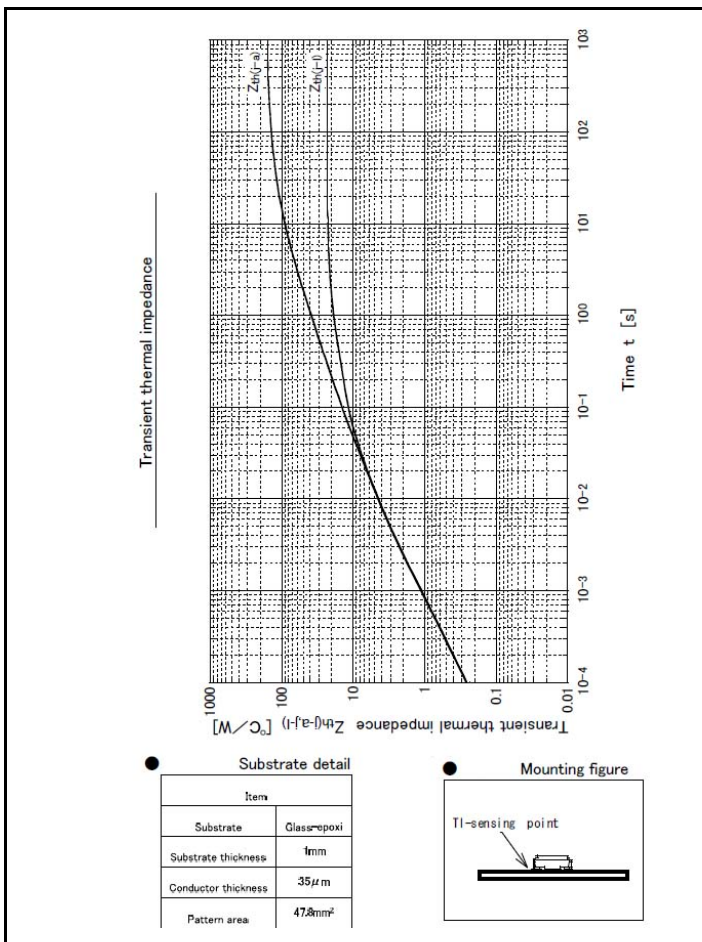
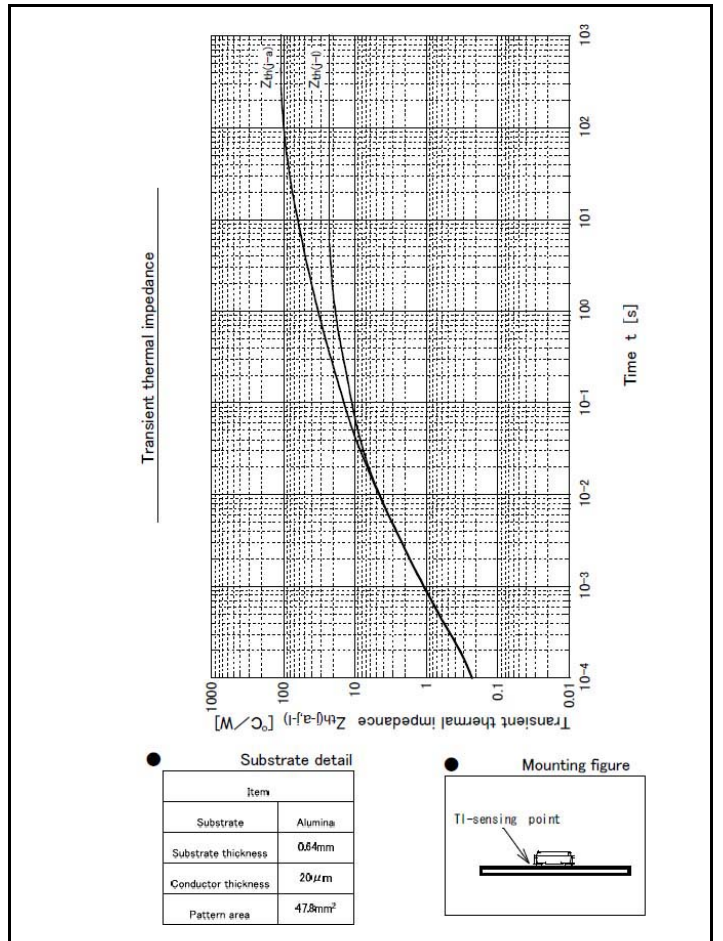
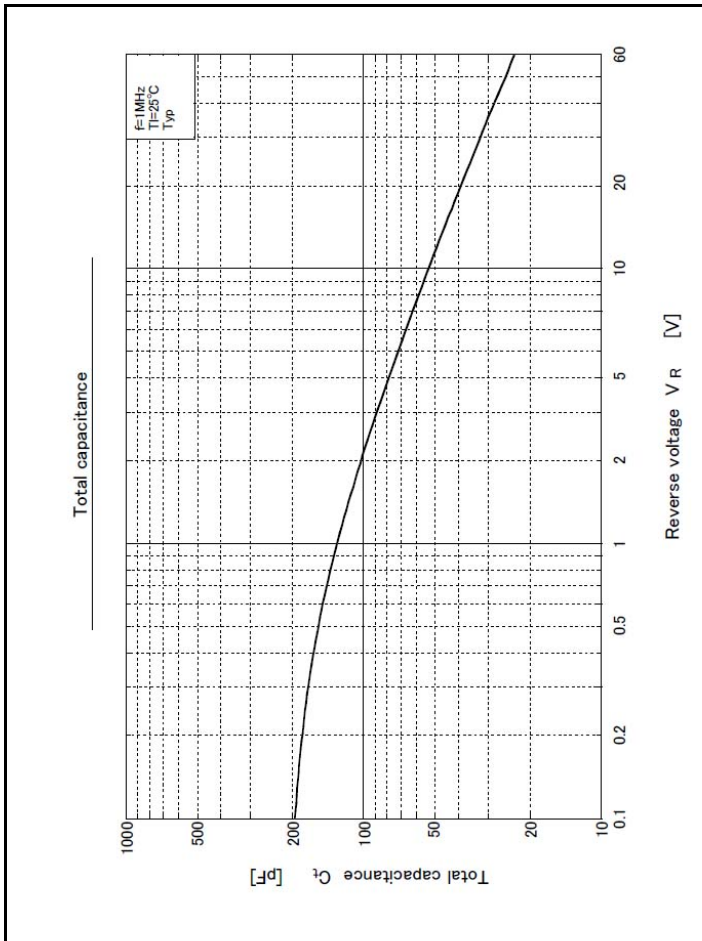
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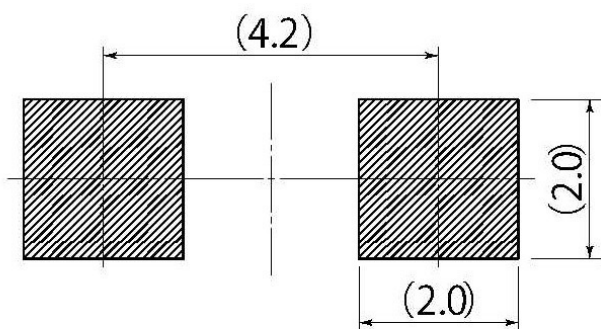
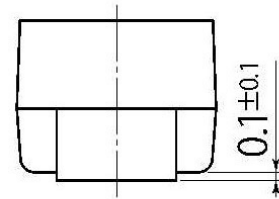
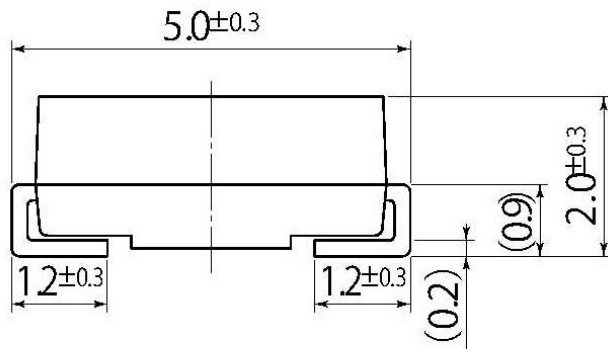
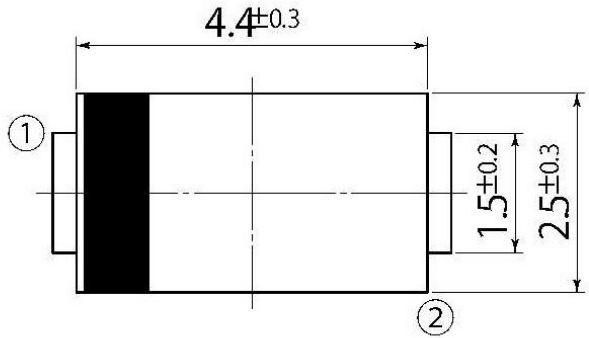
Surge forward current capability





B3

JEDEC Code	DO-214AC
JEITA Code	-
House Name	1F



Referential Soldering Pad

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

## Notes

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