DA3DF30A

Silicon epitaxial planar type

For high frequency rectification

■ Features

- Short reverse recovery time t_{rr}
- Soft recovery

■ Packaging

Tray : 50 pcs

■ Package

- Code
  TO-220D-A1
- Pin Name
  1: Anode
  2: Cathode
  3: Anode

■ Marking Symbol: DAF30A

■ Absolute Maximum Ratings $T_a = 25°C$

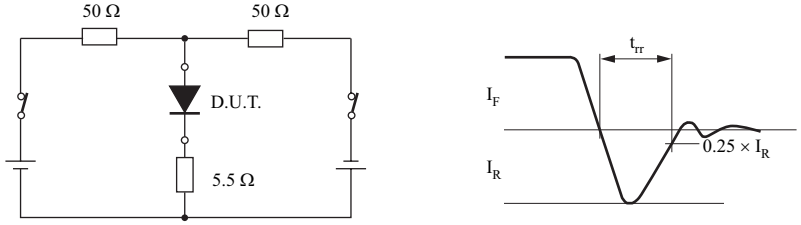
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	350	V
Non-repetitive peak reverse surge voltage	V_{RSM}	350	V
Forward current	I_F	20	A
Non-repetitive peak forward surge current *1	I_{FSM}	100	A
Repetitive peak forward current *2	I_{FRM}	150	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–40 to +150	°C

Note) *1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)
*2: Pulse width < 10 ms. Peak value of the sine wave. (If repeative, RMS current < 20 A)

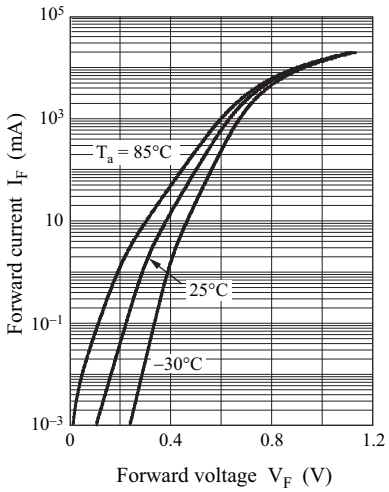
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 20$ A		1.2	1.4	V
Repetitive peak reverse current	I_{RRM}	$V_{RRM} = 350$ V			10	μA
Reverse recovery time *	t_{rr}	$I_F = 0.5$ A, $V_R = 1.0$ V, $I_{rr} = 0.25$ A		12	25	ns
Thermal resistance (j-c)	$R_{th(j-c)}$				4.0	°C/W
Thermal resistance (j-a)	$R_{th(j-a)}$				63	°C/W

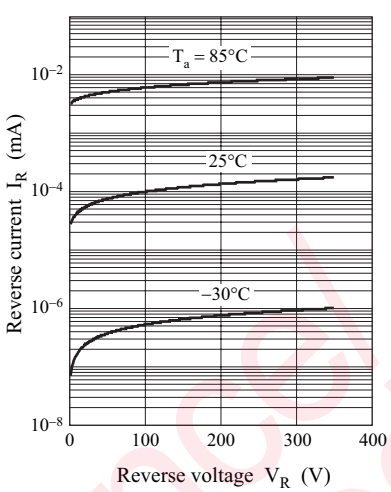
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 10 MHz
3. *: t_{rr} measurement circuit



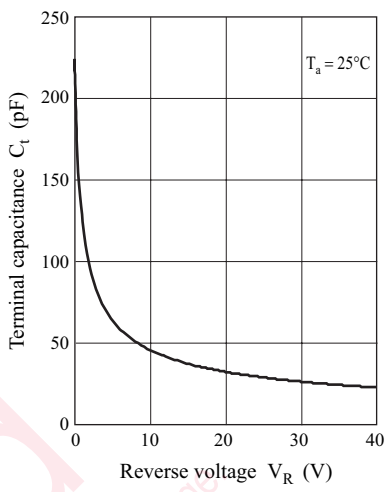
I_F — V_F



I_R — V_R

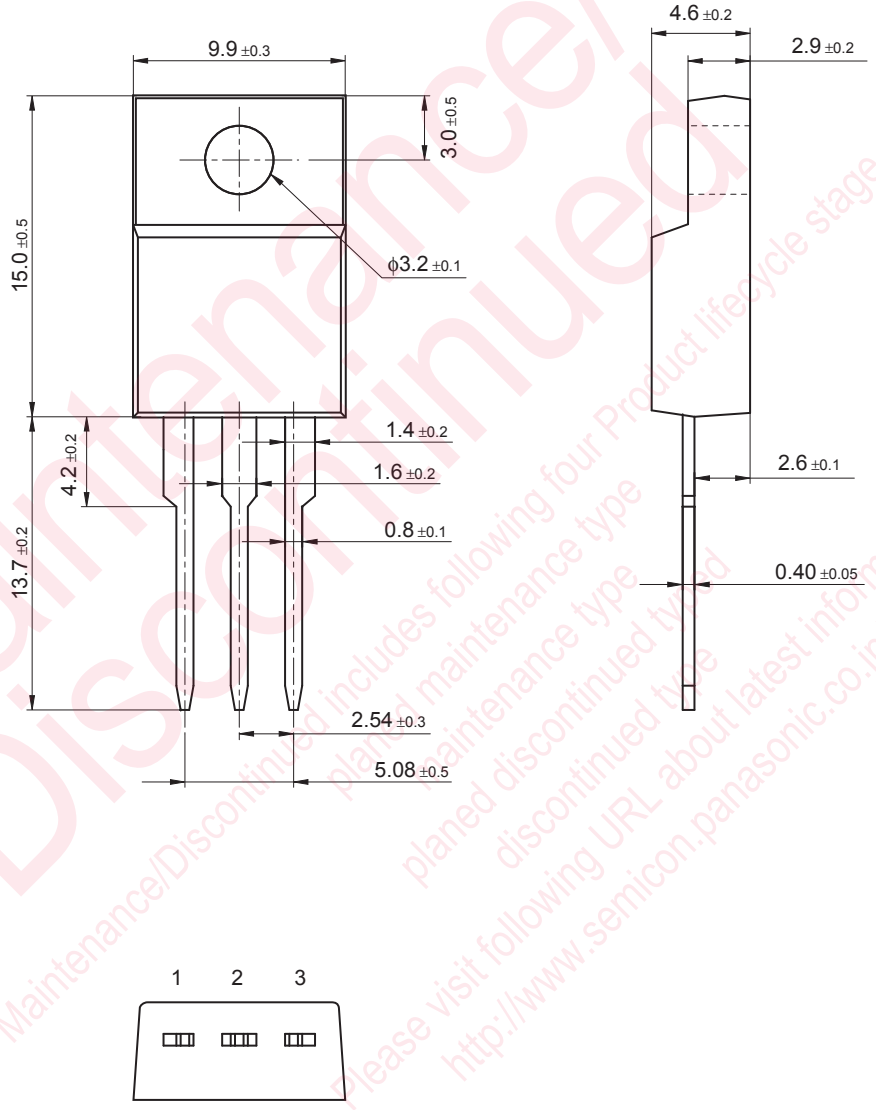


C_t — V_R



TO-220D-A1

Unit: mm



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