TOP ONE SEMI CONDUCTOR

Standard silicon rectifier diodes

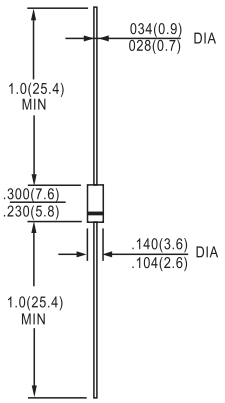
BY226G, BY227G, BY228G

450V-1500V 3.0A

FEATURES

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0

DO-15



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Plastic case DO-201
- Weight approx.: 1 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 1700 pieces per ammo

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Type	Repetitive peak reverse voltage V_{RRM} V	Surge peak reverse voltage V_{RSM} V	Max. reverse recovery time I_F = - A, I_R = - A, I_{RR} = - A t_{rr} ns	Max. forward voltage V_F 2)
BY 226G	450	650	-	1,3
BY 227G	800	1250	-	1,3
BY 228G	1500	1800	-	1,3

Absolute Maximum Ratings			
Symbol	**Condition**	**Values**	**Units**
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C 1)	3	A
I_{FRM}	Repetitive peak forward current f > 15 Hz 1)	10	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave 3)	50	A
i^2t	Rating for fusing, t < 10 ms 3)	12,5	A^2s
R_{thA}	Max. thermal resistance junction to ambient 1)	45	K/W
R_{thT}	Max. thermal resistance junction to terminals 1)	-	K/W
T_j	Operating junction temperature	-50...+175	°C
T_s	Storage temperature	-50...+175	°C

RATINGS AND CHARACTERISTIC CURVES BY226G,BY227G,BY228G

Characteristics			
Symbol	**Conditions**	**Values**	**Units**
I_R	Maximum leakage current, T_j = 25 °C; $V_R = V_{RRM}$	<10	µA
	T_j = 100 °C; $V_R = V_{RRM}$	<50	µA
C_J	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
Q_{rr}	Reverse recovery charge (U_R = V; I_F = A; dI_F/dt = A/ms)	-	µC
E_{RSM}	Non repetitive peak reverse avalanche energy (I_R = mA; T_j = °C; inductive load switched off)	-	mJ

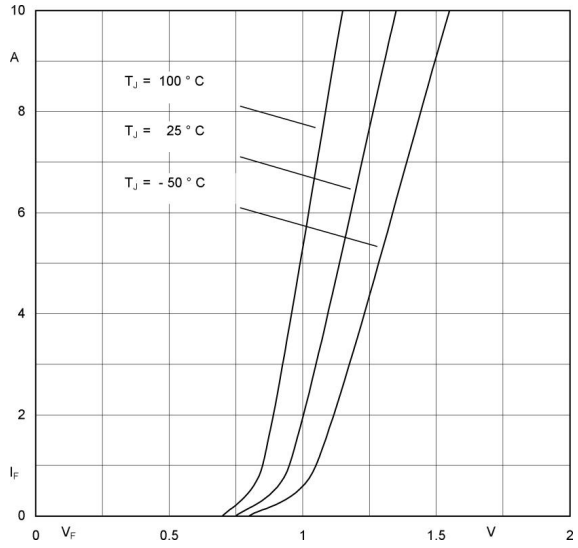


Fig. 1 Forward characteristic (typical values)

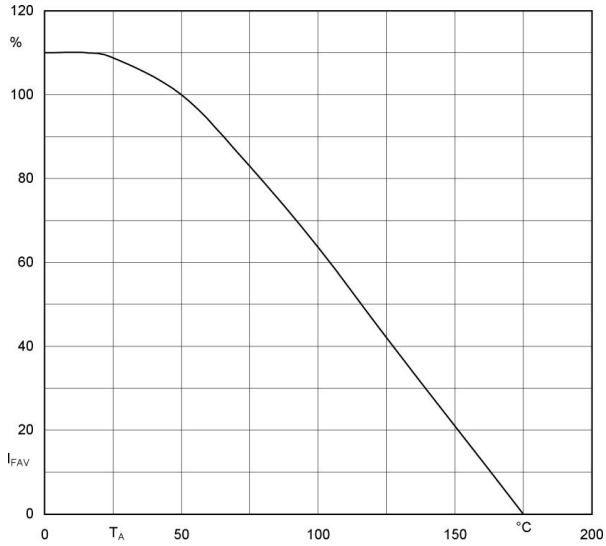


Fig. 2 Rated forward current vs. ambient temperature [1])

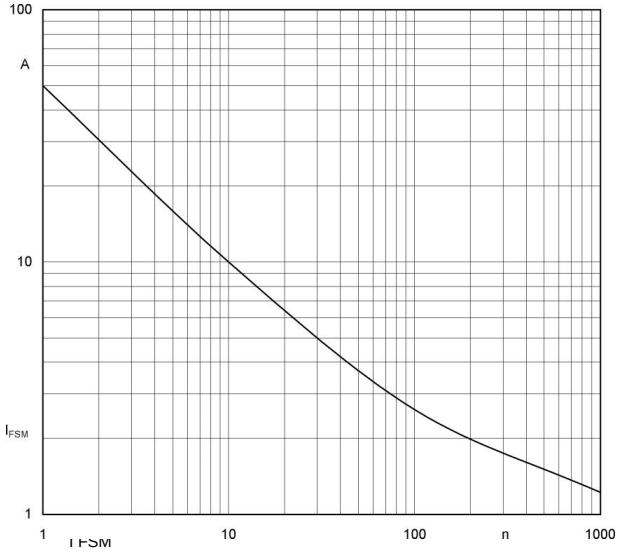


Fig. 3 current versus number of cycles at 50 Hz