

Standard silicon rectifier diodes

BY226G, BY227G, BY228G Vishaymas Semiconductors

FEATURES

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

MECHANICAL DATA

Plastic case: DO-201

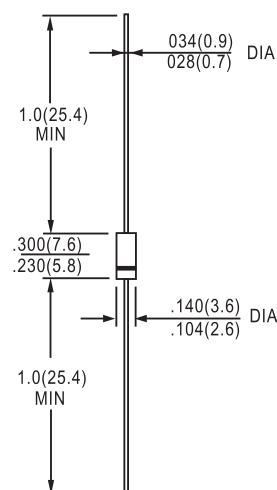
Weight approx: 1g

Terminals: plated terminals solderable per MIL-STD-750

Mounting position: any

Standard packaging: 1700 pieces per ammo

DO-201



Dimensions in inches and(millimeters)

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, $T_A = 50^\circ\text{C}^{(1)}$	3	A
I_{FRM}	Repetitive peak forward current $f > 15\text{ Hz}^{(1)}$	10	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave $^{(3)}$	50	A
i^2t	Rating for fusing, $t < 10\text{ ms}^{(3)}$	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	$^\circ\text{C}$
T_s	Storage temperature	-50...+175	$^\circ\text{C}$

Characteristics			
Symbol	Conditions	Values	Units
I_R	Maximum leakage current, $T_j = 25^\circ\text{C}$; $V_R = V_{RRM}$	<10	μA
	$T_j = 100^\circ\text{C}$; $V_R = V_{RRM}$	<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 ($I_R = \text{mA}$; $T_j = ^\circ\text{C}$; inductive load switched off)	-	mJ

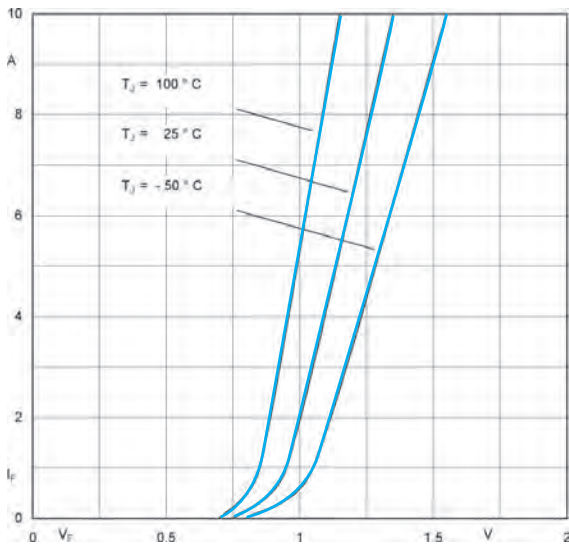


Fig. 1 Forward characteristic (typical values)

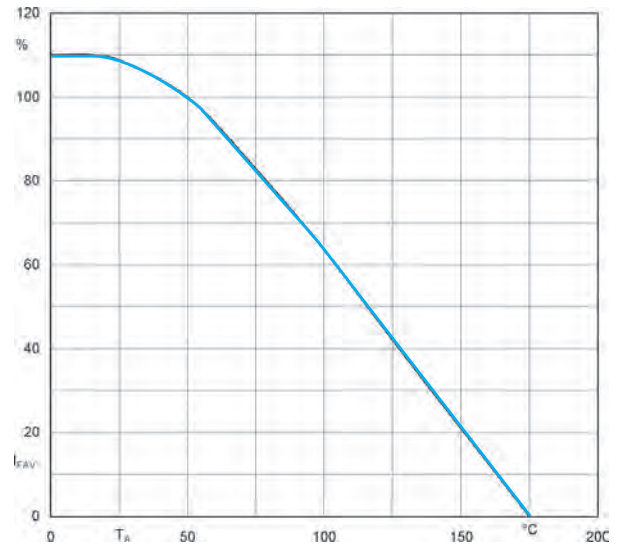


Fig. 2 Rated forward current vs. ambient temperature ¹⁾

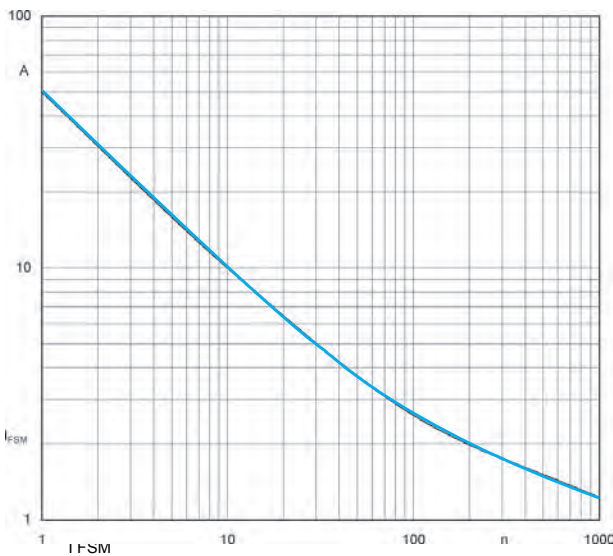


Fig. 3 current versus number of cycles at 50 Hz

