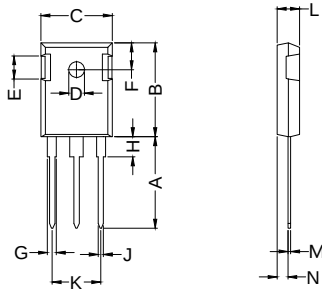


STYN230 thru STYN830

Discrete Thyristors(SCRs)



Dimensions TO-247AD



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	19.81	20.32	0.780	0.800
B	20.80	21.46	0.819	0.845
C	15.75	16.26	0.620	0.640
ØD	3.15	3.65	0.124	0.144
E	4.32	5.49	0.170	0.216
F	5.40	6.30	0.213	0.248
G	1.65	2.18	0.065	0.086
H	3.80	4.50	0.150	0.177
J	1.00	1.40	0.039	0.055
K	10.80	11.10	0.425	0.437
L	4.70	5.30	0.185	0.209
M	0.40	0.80	0.016	0.031
N	1.50	2.49	0.059	0.098

Symbol	Test Conditions	Maximum Ratings STYN230~830 / STYN1030~1630	Unit
I_{TRMS} I_{TAVM}	$T_{VJ}=T_{VJM}$ $T_C=85^{\circ}C$; 180° sine	30 19	A
I_{TSM}	$T_{VJ}=45^{\circ}C$ $V_R=0$ t=10ms (50Hz), sine t=8.3ms (60Hz), sine	160 180	A
	$T_{VJ}=T_{VJM}$ $V_R=0$ t=10ms(50Hz), sine t=8.3ms(60Hz), sine	140 160	
i^2t	$T_{VJ}=45^{\circ}C$ $V_R=0$ t=10ms (50Hz), sine t=8.3ms (60Hz), sine	128 134	A ² s
	$T_{VJ}=T_{VJM}$ $V_R=0$ t=10ms(50Hz), sine t=8.3ms(60Hz), sine	100 105	
$(di/dt)_{cr}$	$T_{VJ}=T_{VJM}$ f=50Hz, t _p =200µs V _D =2/3V _{DRM} I _G =0.15A di _G /dt=0.15A/µs repetitive, I _T =40A	100	A/µs
	non repetitive, I _T =I _{TAVM}	500	
$(dv/dt)_{cr}$	$T_{VJ}=T_{VJM}$; V _{DR} =2/3V _{DRM} R _{GK} =∞; method 1 (linear voltage rise)	500	V/µs
P_{GM}	$T_{VJ}=T_{VJM}$ t _p =30µs	5	W
	I _T =I _{TAVM} t _p =300µs	2.5	
P_{GAV}		0.5	W
V_{RGM}		10	V
T_{VJ} T_{VJM} T_{stg}		-40...+125 125 -40...+125	°C
M_d F_c	Mounting torque (M3)	0.8...1.2	Nm
	Mounting force with clip	20...120	N
Weight	typical	6	g

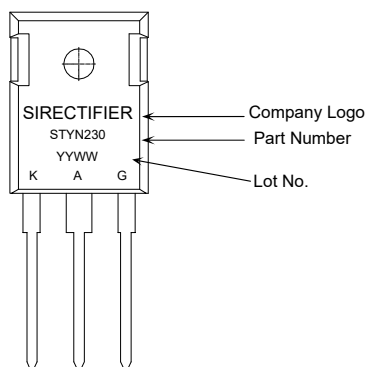
Sirectifier®

STYN230 thru STYN830

Discrete Thyristors(SCRs)

Symbol	Test Conditions	Characteristic Values	Unit
I_R, I_D	$T_{VJ}=T_{VJM}; V_R=V_{RRM}; V_D=V_{DRM}$	5	mA
V_T	$I_T=20A; T_{VJ}=25^{\circ}C$	1.6	V
V_{TO}	For power-loss calculations only ($T_{VJ}=125^{\circ}C$)	0.85	V
r_T		27	m Ω
V_{GT}	$V_D=6V; T_{VJ}=25^{\circ}C$ $T_{VJ}=-40^{\circ}C$	1.5 2.5	V
I_{GT}	$V_D=6V; T_{VJ}=25^{\circ}C$ $T_{VJ}=-40^{\circ}C$	25 50	mA
V_{GD}	$T_{VJ}=T_{VJM}; V_D=2/3V_{DRM}$	0.2	V
I_{GD}		3	mA
I_L	$T_{VJ}=25^{\circ}C; t_p=10\mu s;$ $I_G=0.1A; di_G/dt=0.1A/\mu s$	75	mA
I_H	$T_{VJ}=25^{\circ}C; V_D=6V; R_{GK}=\infty$	50	mA
t_{gd}	$T_{VJ}=25^{\circ}C; V_D=1/2V_{DRM}$ $I_G=0.1A; di_G/dt=0.1A/\mu s$	2	μs
R_{thJC}	DC current	1.0	K/W
R_{thJH}	DC current	typ. 0.25	K/W
a	Max. acceleration, 50 Hz	50	m/s ²

MARKING



ORDERING INFORMATION

Part Number	Package	Shipping	Marking Code
STYN230	TO-247AD	30pcs / Tube	STYN230

Sirectifier®