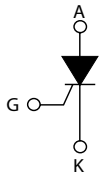
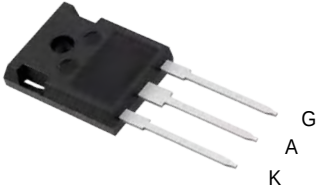
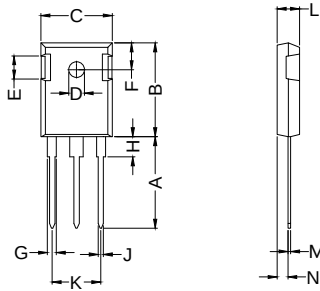


STYN255 thru STYN855

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

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter		Value	Unit
$I_{T(RMS)}$	RMS on-state current (180° conduction angle)		$T_c = 75^\circ C$	A
$I_{T(AV)}$	Average on-state current (180° conduction angle)		$T_c = 75^\circ C$	A
I_{TSM}	Non repetitive surge peak on-state current	$t_p = 8.3 \text{ ms}$	$T_j = 25^\circ C$	A
		$t_p = 10 \text{ ms}$		
$I^2 t$	$I^2 t$ Value for fusing		$T_j = 25^\circ C$	$A^2 s$
di/dt	Critical rate of rise of on-state current $I_G = 2 \times I_{GT}$, $t_r \leq 100 \text{ ns}$	$F = 60 \text{ Hz}$	$T_j = 125^\circ C$	$A/\mu s$
I_{GM}	Peak gate current	$t_p = 20 \mu s$	$T_j = 125^\circ C$	A
$P_{G(AV)}$	Average gate power dissipation		$T_j = 125^\circ C$	W
T_{stg} T_j	Storage junction temperature range Operating junction temperature range		- 40 to + 150 - 40 to + 125	$^\circ C$
V_{RGM}	Maximum peak reverse gate voltage		5	V

STYN255 thru STYN855

Discrete Thyristors(SCRs)

ELECTRICAL CHARACTERISTICS (T_j = 25°C, unless otherwise specified)

Symbol	Test Conditions			TYNx08(S)	Unit
I _{GT}	V _D = 12 V R _L = 33 W	MIN.		8	mA
				80	
V _{GT}		MAX.		1.3	V
V _{GD}	V _D = V _{DRM} R _L = 3.3 kW	T _j = 125°C	MIN.	0.2	V
I _H	I _T = 500mA Gate open		MAX.	150	mA
I _L	I _G = 1.2 I _{GT}		MAX.	200	mA
dV/dt	V _D = 67 % V _{DRM} Gate open	T _j = 125°C	MIN.	1000	V/μs
V _{TM}	I _{TM} = 100 A tp = 380 μs	T _j = 25°C	MAX.	1.9	V
V _{t0}	Threshold voltage	T _j = 125°C	MAX.	1.0	V
R _d	Dynamic resistance	T _j = 125°C	MAX.	8.5	mW
I _{DRM} I _{RRM}	V _{DRM} = V _{RRM}	T _j = 25°C	MAX.	10	μA
		T _j = 125°C		5	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
R _{th(j-c)}	Junction to case (DC)	0.9	°C/W
R _{th(j-a)}	Junction to ambient (DC)	50	°C/W

S= copper surface under tab

PRODUCT SELECTOR

Part Number	Voltage (xxx)	Sensitivity	Package
STYNx55	200~~800	80 mA	TO-247AD

OTHER INFORMATION

Part Number	Marking	Weight	Base Quantity	Packing mode
STYN x55	STYN x55	6 g	120	Bulk

Note: x = voltage

