

● **Description:**

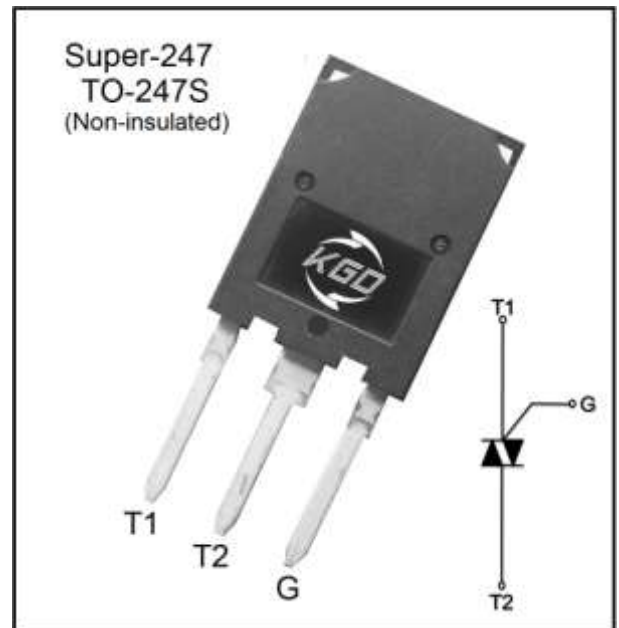
High current density due to double mesa technology;
GT80 Series triacs is suitable for general purpose AC switching.

● **Applications:**

they can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits... or for phase control operation light dimmers, motor speed controllers

● **Features:**

GT80 series are 3 Quadrants TRIACS, They are specially recommended for use on inductive loads.
GT80 series are non-insulated design
Blocking voltage to 1000/12000/1600V
On-state RMS current to 80A
Non-repetitive peak on-state current to 800A



● **Absolute Maximum Ratings**

Symbol	Parameter	Conditions	Min	Max	Unit
V_{DRM}	Repetitive peak off-state voltage	$T_J=25^{\circ}C$	1000	1600	V
V_{RRM}	Repetitive peak Reverse voltage	$T_J=25^{\circ}C$	1000	1600	V
$I_{T(RMS)}$	RMS on-state current	$F=60Hz, T_c=70^{\circ}C$	-	80	A
I_{TSM}	Non-repetitive peak On-state current	$F=50Hz, t=10ms$	-	800	A
		$F=60Hz, t=8.3ms$	-	852	A
I^2t	I^2t for fusing	$T_p=10ms$	-	3200	A^2S
di/dt	Critical rate of rise of on-state current	$I_G=2 \times I_{GT}, t_r \leq 100ns, f=120HZ, T_J=125^{\circ}C$	-	100	$A/\mu s$
I_{GM}	Peak gate current		-	8.0	A
P_{GM}	Peak gate power	$T_p=20\mu s, T_J=125^{\circ}C$	-	10	W
$P_{G(AV)}$	Average gate power		-	2.0	W
T_{STG}	Storage temperature		-40	150	$^{\circ}C$
T_J	Junction temperature		-40	125	$^{\circ}C$

GT80 Series

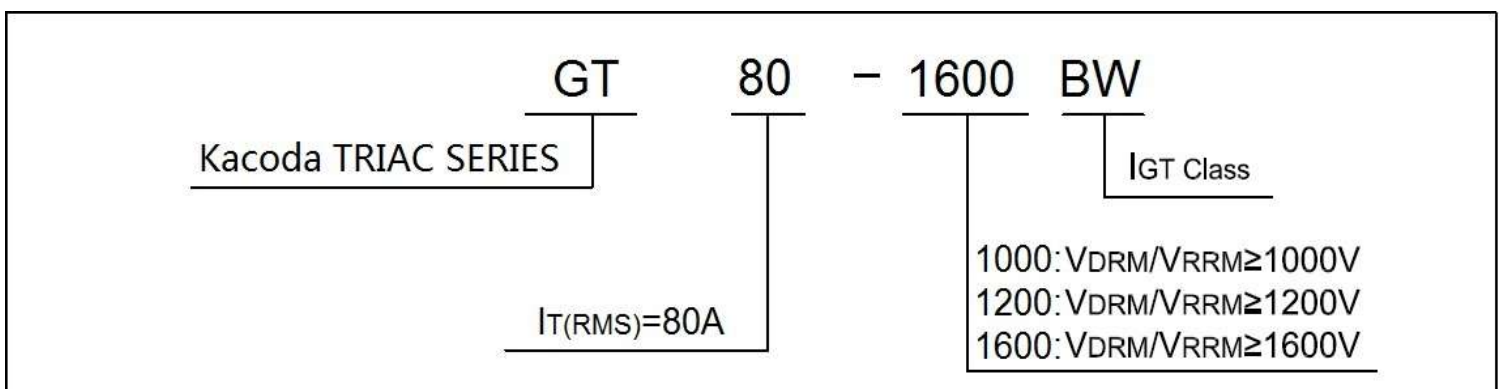
● Thermal Characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
$R_{th(j-mb)}$	Junction to Case(AC)	Full cycle	-	-	0.35	$^{\circ}C/W$
$R_{th(j-a)}$	Junction to am bient	mounted,minimum pad sizes	-	40	-	$^{\circ}C/W$

● Electrical Characteristics

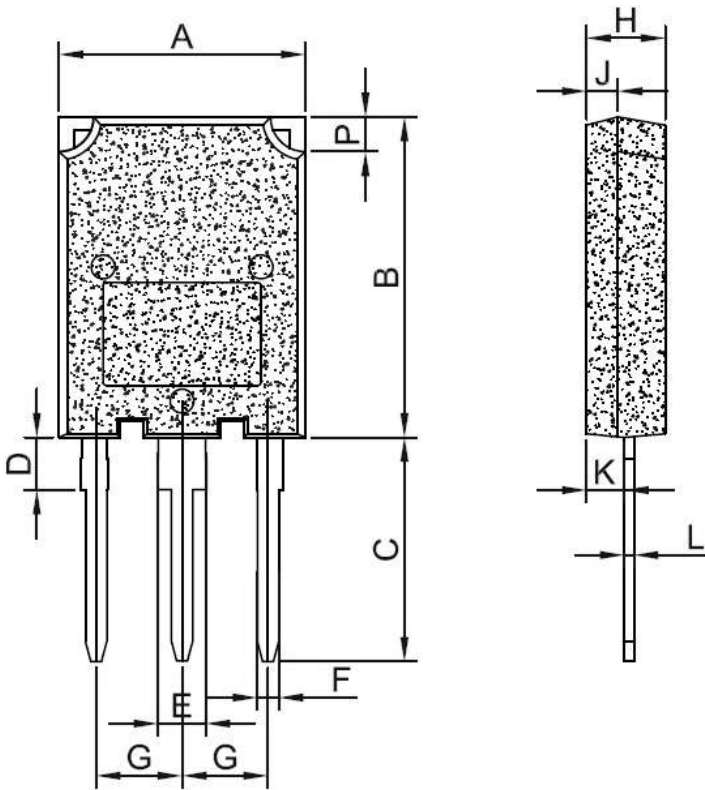
Symbol	Conditions	Quadrant	Numerical			Unit
			GT80-1000B	GT80-1200B	GT80-1600B	
V_{TM}	$I_T=120A, tp=380\mu s$	$T_J=25^{\circ}C$ MAX	1.3	1.3	1.55	V
I_{DRM}	$V_D=V_{DRM}, V_R=V_{RRM}$	$T_J=25^{\circ}C$ MAX		50		μA
I_{RRM}		$T_J=125^{\circ}C$ MAX		10		mA
I_{GT}	$V_D=12V, R_L=33\Omega$	I-II-III MAX		50		mA
V_{GT}		I-II-III MAX		1.3		V
V_{GD}	$V_D=V_{DRM}, R_L=3.3K\Omega, T_J=125^{\circ}C$	I-II-III MIN		0.2		V
I_L		$I_T=1.2I_{GT}$	I-III MAX		80	
	II MAX			100		mA
I_H	$I_T=100mA$	MAX		60		mA
dv/dt	$V_{DM}=67\%V_{DRM}, \text{gate open}, T_J=125^{\circ}C$	MIN		1000		V/ μs

● Ordering Information



● Package Outline Dimensions

Super-247(TO-247S)



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	15.1	16.1	0.595	0.632
B	19.8	20.8	0.78	0.818
C	13.8	14.8	0.544	0.582
D	3.0	4.0	0.118	0.157
E	2.75	3.35	0.108	0.132
F	1.3	1.5	0.051	0.059
G	5.1	5.8	0.201	0.228
H	4.5	5.5	0.178	0.216
J	1.45	2.15	0.058	0.084
K	1.9	2.8	0.075	0.110
L	0.55	0.8	0.022	0.032
P	2	2.4	0.079	0.095

● Marking

