

Huangshan Electric Appliance Co.,Ltd

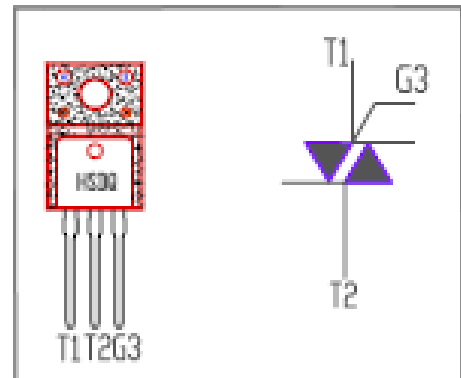
HSDQ BTA16-800F TRIAC

●DESCRIPTION:

High current density due to mesa technology.

These series of silicon controlled rectifiers are specifically designed for medium power switching and phase control applications.

These series are suitable for general purpose applications, a high gate sensitivity is required.



●ABSOLUTE MAX I MUM RATINGS

Symbol	PARAMETER		Value	Unit
$I_{T(RMS)}$	RMS on-state current(all conduction angels)	$T_c=80^{\circ}C$ $T_c=90^{\circ}C$	16	A
I_{TSM}	Non repetitive surge peak on-state current (half sine cycle, $T_j=25^{\circ}C$)	$F=50HZ$ $t=20ms$	160	A
		$F=60HZ$ $t=16.7ms$	168	A
I^2t	I^2t Value for fusing	$tp=10ms$	144	A^2S
di/dt	Repetitive rate of rise of on-state current after triggering $I_{TM}=20A$ $I_G=70mA$ dI_G/dt 50mA/ms	$T_j=125^{\circ}C$	50	A/us
V_{DRM} V_{RRM}	Repetitive Peak Off-state Voltage Repetitive Peak Reverse Voltage	$T_j=25^{\circ}C$	800	V
I_{GM}	Peak gate current $tp=20us,$	$T_j=125^{\circ}C$	4	A
$P_{G(AV)}$	Average gate power dissipation	$T_j=125^{\circ}C$	1	W
T_{stg} T_j	Storage junction temperature range Operrating junction temperature range		-40to+150 -40to+125	$^{\circ}C$

●electrical characteristics

Symbol	Test Condition	Quadrant		Value				Unit
I_{GT}	$V_D=12V \quad R_L=33\Omega$	I II III	MAX	T	S	C	B	mA
				5	10	35	50	
V_{GT}			MAX	1.5				V
V_{GD}	$V_D=V_{DRM} \quad R_L=3.5K\Omega$ $T_j=125^\circ C$		MIN	0.2				V
I_H	$I_T=0.5A$		MAX	60				mA
I_L	$I_G=1.2I_{GT}$		MAX	100				mA
dv/dt	$V_D=67\% V_{DRM}$ gate open($T_j=125^\circ C$)		MIN	1000				V/us
(dv/dt)c	$T_j=125^\circ C$		MIN	10				V/us

●STATIC CHARACTERISTICS

Symbol	Parameter			Value	Unit
V_{TM}	$I_{TM}=32A, \quad t_p=380\mu s$	$T_j=25^\circ C$	MAX	1.50	V
V_{TO}		threshold voltage	$T_j=125^\circ C$	MAX	0.87
R_d	Slope resistance	$T_j=125^\circ C$	MAX	14.6	m Ω
I_{DRM}	$V_D=V_{DRM} \quad V_R=V_{RRM}$	$T_j=25^\circ C$	MAX	5	uA
I_{RRM}		$T_j=125^\circ C$		1	mA
$R_{th(j-c)}$	Junction to case(DC)			1.3	$^\circ C/W$

● ORDERING INFORMATION

HSDQ _____ HSDQ

BTA16-800 _____ Product Parameter

B1230 _____ date of manufacture

● TO-220F outline dimensional drawing

