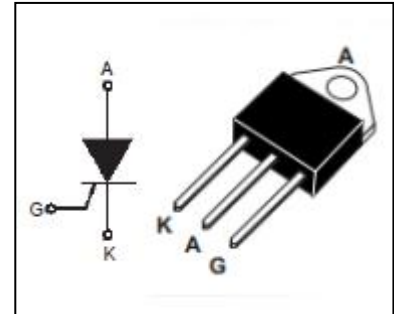


APPLICATIONS

Available in high power packages, BTW69 Series is suitable in applications where power handling and power dissipation are critical, such as solid state relays, welding equipment, high power motor

Minimum Lot-to-Lot variations for robust device performance and reliable operation

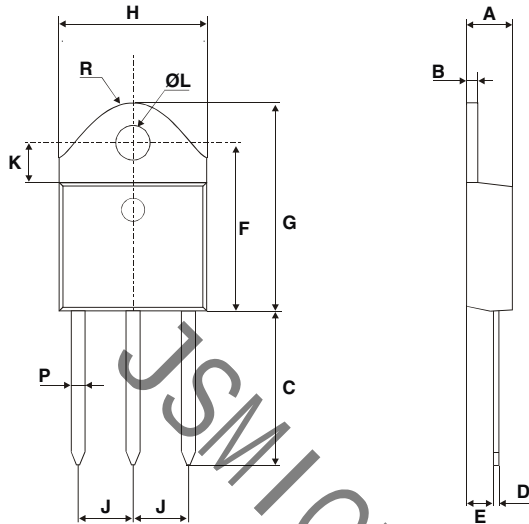


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	1200	V
V_{RRM}	Repetitive peak reverse voltage	1200	V
$I_{\text{T(AV)}}$	Average on-state current, $T_c=70^{\circ}\text{C}$	31	A
$I_{\text{T(RMS)}}$	RMS on-state current, $T_c=70^{\circ}\text{C}$	50	A
I_{TSM}	Surge non-repetitive on-state current	500	A
$P_{\text{G(AV)}}$	Average gate power dissipation	1	W
T_j	Operating junction temperature	-40~125	$^{\circ}\text{C}$
T_{stg}	Storage temperature	-40~150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_c=25^{\circ}\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$		10	μA
				5	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$		10	μA
				5	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=100\text{A}$		1.6	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}$; $R_{\text{L}}=33\Omega$		50	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}$; $R_{\text{L}}=33\Omega$		1.3	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		0.45	$^{\circ}\text{C/W}$

TO-3P (Insulated and non insulated) Package Mechanical Data


REF.	DIMENSIONS					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.4		4.6	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.60	0.565		0.614
D	0.5		0.7	0.020		0.028
E	2.7		2.9	0.106		0.114
F	15.8		16.5	0.622		0.650
G	20.4		21.1	0.815		0.831
H	15.1		15.5	0.594		0.610
J	5.4		5.65	0.213		0.222
K	3.4		3.65	0.134		0.144
ØL	4.08		4.17	0.161		0.164
P	1.20		1.40	0.047		0.055
R		4.60			0.181	