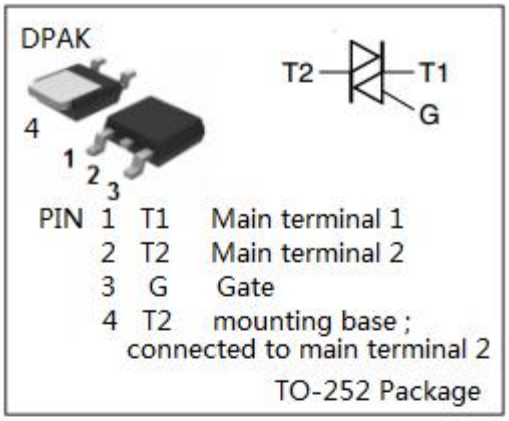
isc Triacs MAC4DHMT4

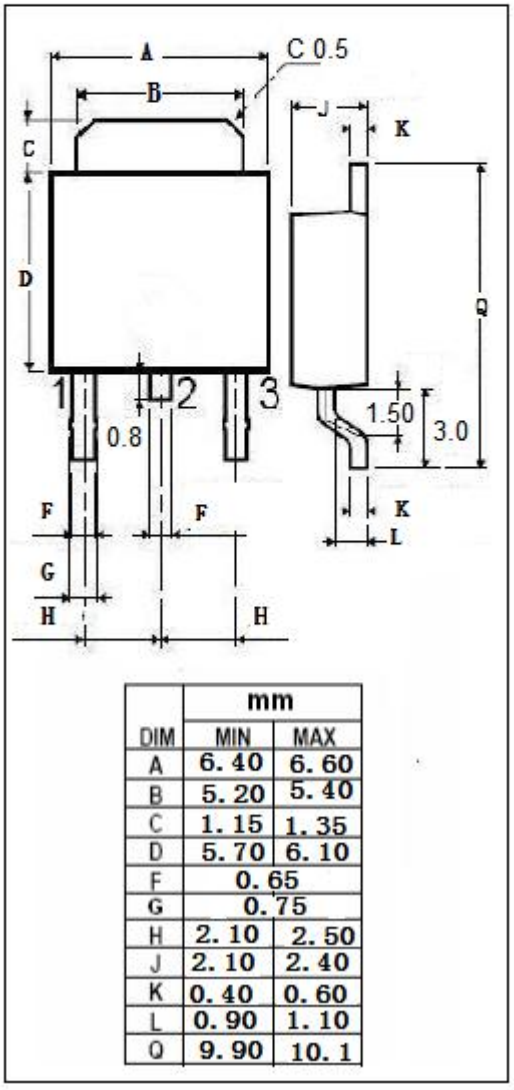


DESCRIPTION

- Small size surface mount DPAK package
- Passivated die for reliability and uniformity
- Low level triggering and holding characteristics
- Triggering in all four quadrants
- Blocking voltage to 600V
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high volume,low cost ,industrial and consumer applications such as motor control; process control;temperature,light and speed control



DIM	mm MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	600	V
$I_{T(RMS)}$	RMS on-state current (full sine wave;Tc=93℃)	4	A
I_{TSM}	Non-repetitive peak on-state current(Tj=110℃)	40	A
I^2t	I^2t for fusing tp=8.3ms	6.6	A^2S
I_{GM}	Peak gate current	0.2	A
V_{GM}	Peak gate voltage	5	V
P_{GM}	Peak gate power dissipation	0.5	W
$P_{G(AV)}$	Average gate power dissipation	0.1	W
T_j	Operating junction temperature	-40~110	℃
T_{stg}	Storage temperature	-40~150	℃

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
I_{DRM}	Repetitive peak off-state current		V_D=V_{DRM}, V_D=V_{DRM}, Tj=110℃		0.01 2.0	mA
I_{GT}	Gate trigger current	I	V_D=12V;R_L= 100Ω		5	mA
		II			5	
		III			5	
		IV			10	
V_{TM}	On-state voltage		I_T= 6A		1.6	V
I_H	Holding current		V_D= 12V		15	mA
I_L	Holding current	I	V_D= 12V，I_G=5mA		10	mA
		II	V_D= 12V，I_G=5mA		10	mA
		III	V_D= 12V，I_G=5mA		10	mA
		IV	V_D= 12V，I_G=10mA		10	mA
V_{GT}	Gate trigger voltage		V_D=12V; R_L= 100Ω		1.3	V