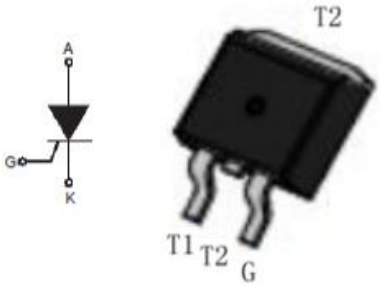
isc Triacs 25TTS16S2L-M3

DESCRIPTION

· Flexible solution for reliable AC power rectification

· Easy control peak current at charger power up to reducepassive / electromechanical components



APPLICATION

· On-board and off-board EV / HEV battery chargers

· Renewable energy inverters

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive Peak Off-state Voltage	1600	V
V_{RRM}	Repetitive Peak Off-state Voltage	1600	V
$I_{T(AV)}$	Sinusoidal waveform	16	A
$I_{T(RMS)}$	Non Repetitive Surge Peak On-state Current (T_C≤ 83℃)	25	A
I_{TSM}	Non-repetitive Peak On-state Current 10 ms sine pulse, rated VRRM applied	300	A
	Non-repetitive Peak On-state Current 10 ms sine pulse, no voltage reapplied	350	
I^2t	I^2t Value for Fusing (10 ms sine pulse, rated VRRM applied)	450	A^2S
	I^2t Value for Fusing (10 ms sine pulse, no voltage reapplied)	630	
$P_{G(AV)}$	Maximum average gate power	2.0	W
V_{TM}	Maximum on-state voltage drop	1.25	V
T_J	Operating Junction Temperature	-40~125	℃
T_{stg}	Storage Temperature	-40~125	℃

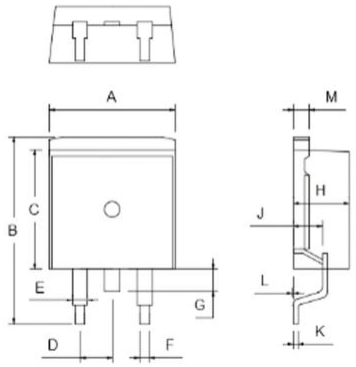
THERMAL RESISTANCES

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.1	℃/W

ELECTRICAL CHARACTERISTICS (T_J=25℃ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
I_{RRM}/I_{DRM}	Reverse and direct leakage current	$V_R=V_{RRM}$, T_J= 25℃	0.5	mA
		$V_R=V_{RRM}$, T_J= 125℃	10	mA
I_{GT}	Gate trigger current	V_D = 6 V, resistive load	45	mA
I_H	Holding current	Anode supply = 6 V,resistive load initial I_T = 1 A, T_J= 25℃	150	mA
V_{GT}	Gate trigger voltage all quadrant	V_D=12V, , resistive load	2.0	V
V_{TM}	On-state voltage	I_{TM}=16A	1.25	V

PACKAGE OUTLINE



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.4		9.6	0.37		0.378
D		2.54			0.100	
E	1.20		1.40	0.047		0.055
F	0.75		0.85	0.029		0.033
G			1.75			0.069
H	4.40		4.70	0.173		0.185
J	2.30		2.70	0.091		0.106
K	0.38		0.55	0.015		0.022
L	0	0.10	0.25	0	0.004	0.010
M	1.25		1.35	0.049		0.053

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