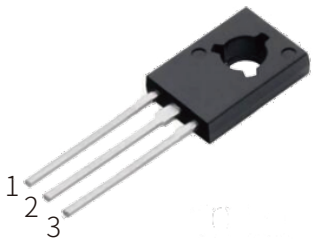
FEATURES

- Glass-passivated mesa chip for reliability and uniform
- High current output up to 2.0 A



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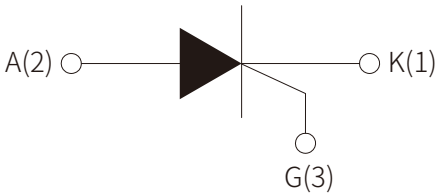
APPLICATIONS

- Flash lamp
- Electronic ballast
- Igniter



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Repetitive peak off-state voltage (T_j=25°C)	V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25°C)	V_{RRM}	600	
RMS on-state current	$I_{T(RMS)}$	2	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	20	
I^2t value for fusing (tp=10ms)	I^2t	2	A^2S
Critical rate of rise of on-state current (I_G=2*I_{GT})	dI/dt	50	A/μs
Peak gate current	I_{GM}	0.2	A
Average gate power dissipation	$P_{G(AV)}$	0.1	W
Peak gate power	P_{GM}	0.5	W
Storage junction temperature range	T_{STG}	-40~+150	°C
Operating junction temperature range	T_j	-40~+110	

ELECTRICAL CHARACTERISTICS (T_j=25°C unless otherwise specified)

Symbol	Test Condition	Min.	Typ.	Max.	Unit
I_{GT}	V_D=12V,R_L=33Ω		50	200	μA
V_{GT}			0.6	0.8	V
V_{GD}	V_D=V_{DRM},T_j=110°C	0.2			
I_H	I_T=50mA			5	mA
I_L	I_G=1.2I_{GT}			6	
dV_D/dt	V_D=2/3×V_{DRM} T_j=110°C R_{GK}=1KΩ	20			V/μs

STATIC CHARACTERISTICS

Symbol	Parameter		Value	Unit
V_{TM}	I_{TM}=4A,tp=380μs	T_j=25°C	⩽1.5	V
I_{DRM}	V_D=V_{DRM}=V_{RRM} R_{GK}=1KΩ		⩽5	μA
I_{RRM}		T_j=110°C	⩽0.1	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	Junction to case(AC)	7.0	°C/W

PARAMETER CHARACTERISTIC CURVE

FIG.1 Maximum Average power Dissipation Versus Average On-State Current

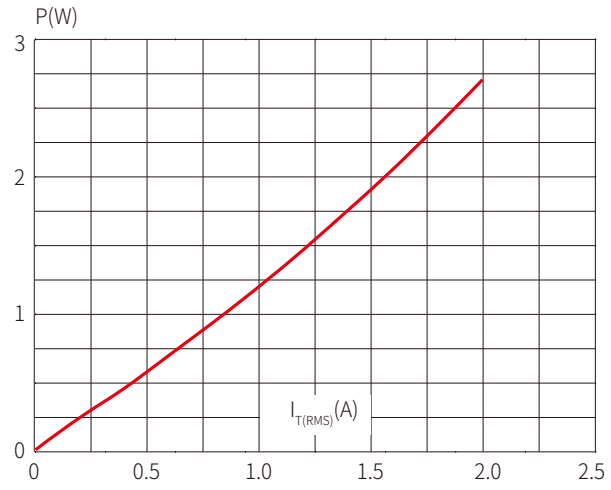


FIG.2: RMS On-state Current Versus Case Temperature

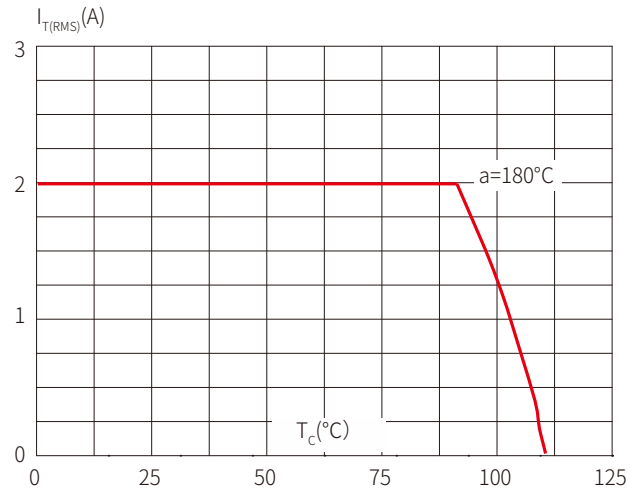


FIG.3: Surge peak on-state current versus Number of cycles

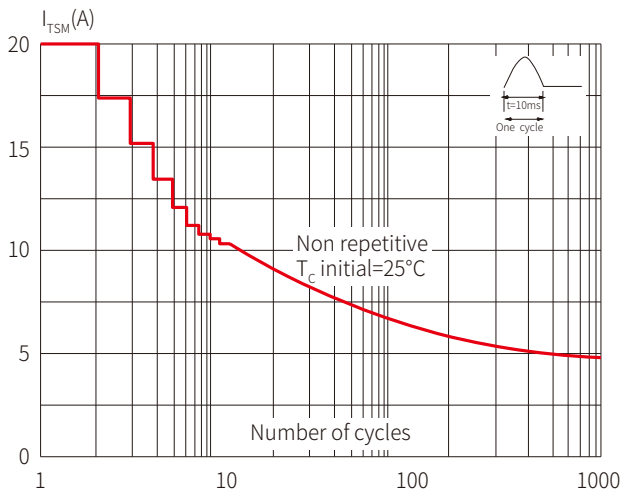


FIG.4 On-State Characteristics (Maximum Values)

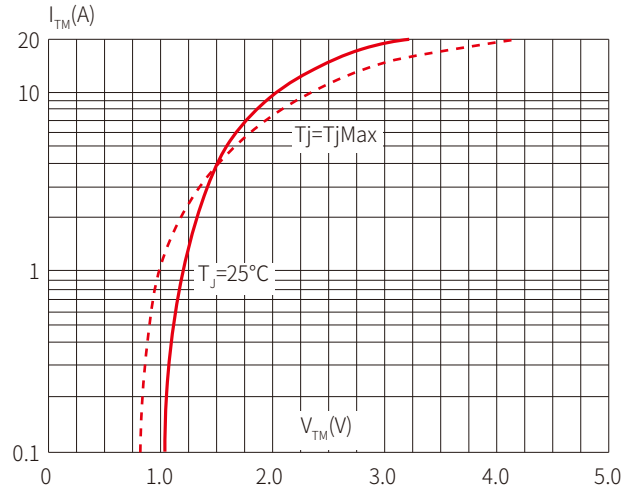


FIG.5: Non-Repetitive Surge Peak on-state current for a sinusoidal pulse with width tp<10ms and corresponding value of I²t

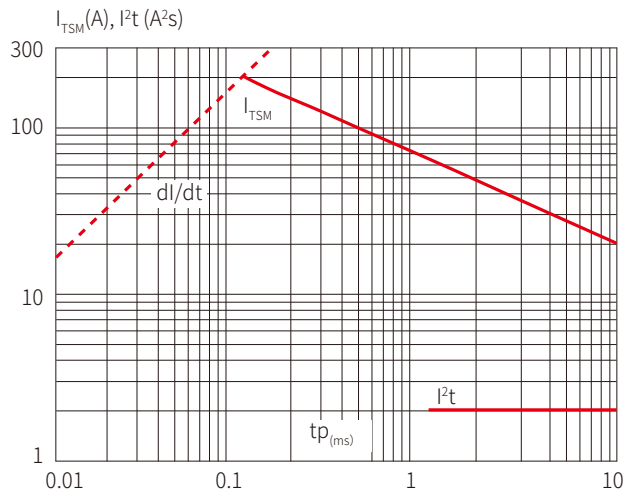
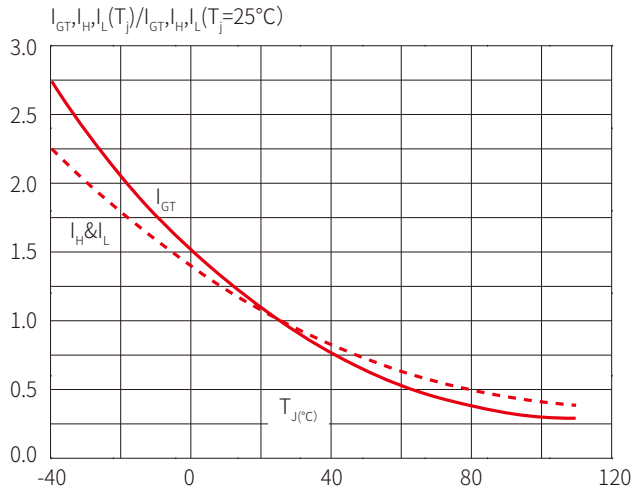
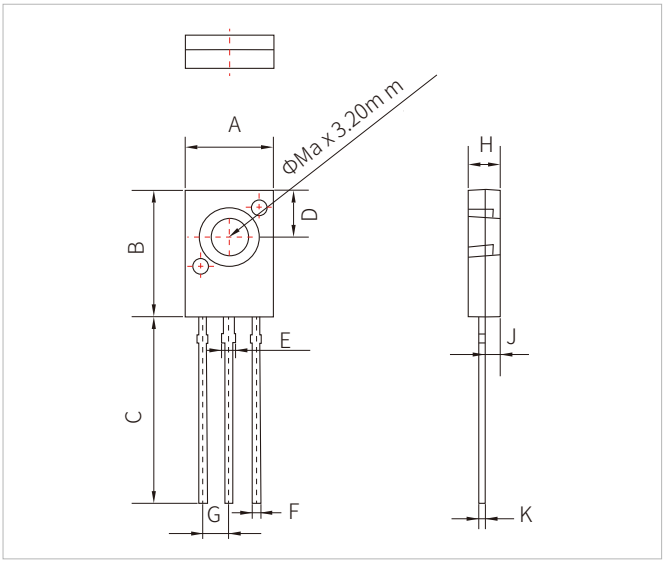


FIG.6 Relative Variations Of Gate Trigger Current, Holding Current And Latching Current Versus Junction Temperature



TO-126 ACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	7.40		7.80	0.291		0.307
B	10.6		11.2	0.417		0.441
C	15.3		16.3	0.602		0.642
D	3.90		4.10	0.154		0.161
E	1.17		1.47	0.046		0.058
F	0.66		0.86	0.026		0.034
G		2.29			0.090	
H	2.50		2.90	0.098		0.114
J	1.10		1.50	0.043		0.059
K	0.45		0.60	0.018		0.024

ORDERING INFORMATION

Part Number	Marking	Package	Qty/pcs
			Bag
SCQ2C60	SCQ2C60 XXXX	TO-126	500

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