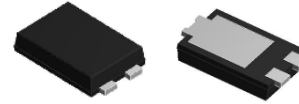


Features

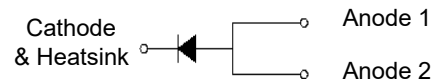
- Low power loss, high efficiency
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- Excellent high temperature stability
- Trench MOS Schottky technology
- Suffix "H" indicates halogen free parts



eSGC (TO - 277)

Mechanical Data

- Case: TO-277B small outline plastic package
- Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- Molding Compound Flammability Rating:UL94-0
- High temperature soldering guaranteed:
260°C /10second



Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless other wise specified.

Parameter	Symbols	ST10100L	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current	$I_{F(AV)}^{(1)}$	10.0	A
	$I_{F(AV)}^{(2)}$	5.0	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	200	A
Operating junction and storage temperature rang	T_j, T_{STG}	-65 --- +150	°C

Note:

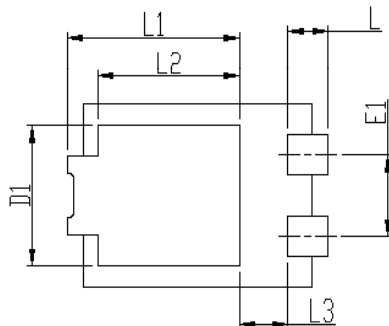
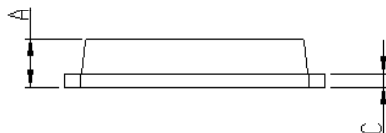
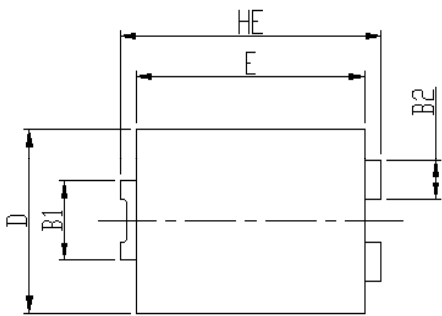
- 1) The thermal resistance from junction to ambient ,case or mount , mounted on P.C.B with 30×30mm copper pads,2 OZ,FR4PCB
- 2) Mounted on recommended copper pad area pad area , free air.

Electrical characteristics

(T_A = 25 °C unless otherwise noted)

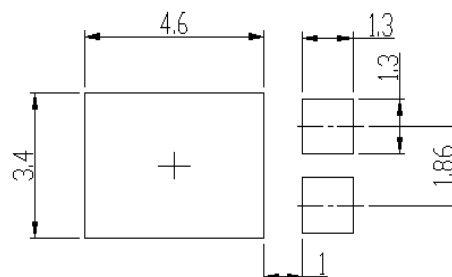
Parameter	Test conditions		Symbols	Typ.	Max.	Unit
Instantaneous forward voltage	I _F =3A	T _A =25	V _F	0.43		V
	I _F =5A			0.51		
	I _F =10A			0.59	0.64	
	I _F =15A			0.67	0.74	
	I _F =3A	T _A =125		0.36		
	I _F =5A			0.44		
	I _F =10A			0.57	0.62	
	I _F =15A			0.62	0.68	
Instantaneous reverse current	Rated VR	T _A =25°C	I _R	0.02	0.08	mA
		T _A =125°C		12	20	
Typical junction capacitance	4.0 V, 1 MHz		C _J	0.95		nF

Package Outline



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52 Typ.		0.139 Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86 Typ.		0.073 Typ.	

Soldering footprint



Package Information

Qty: 5,000 /Tape and reel

Rating and charactertic curves

