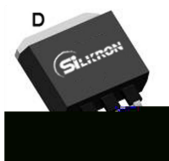
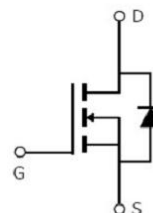


**Main Product Characteristics:**

$V_{DSS}$	100V
$R_{DS(on)}$	3.9m (typ.)
$I_D$	100A


**TO-263 (D2PAK)**

**Schematic Diagram**
**Features and Benefits:**

- Advanced MOSFET process technology
- Special designed for PWM, load switching and general purpose applications
- Ultra low on-resistance with low gate charge
- Fast switching and reverse body recovery
- 150 operating temperature


**Description:**

It utilizes the latest processing techniques to achieve the high cell density and reduces the on-resistance with high repetitive avalanche rating. These features combine to make this design an extremely efficient and reliable device for use in power switching application and a wide variety of other applications.

**Absolute Max Rating:**

Symbol	Parameter	Max.	Units
$I_D @ T_C = 25^\circ\text{C}$	Continuous Drain Current, $V_{GS} @ 10\text{V}$	100	A
$I_{DM}$	Pulsed Drain Current	400	
$P_D @ T_C = 25^\circ\text{C}$	Power Dissipation	128	W
$V_{DS}$	Drain-Source Voltage	100	V
$V_{GS}$	Gate-to-Source Voltage	$\pm 20$	V
$T_J \quad T_{STG}$	Operating Junction and Storage Temperature Range	-55 to +150	$^\circ\text{C}$

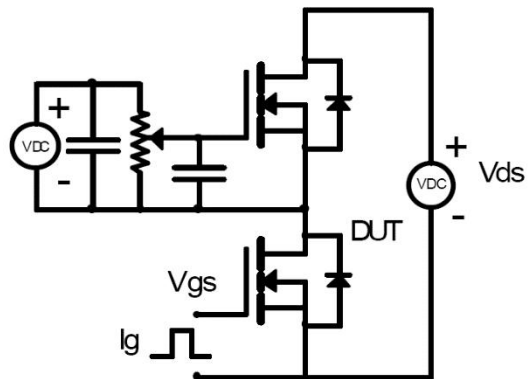
Thermal Roric

## Test Circuits and Waveforms

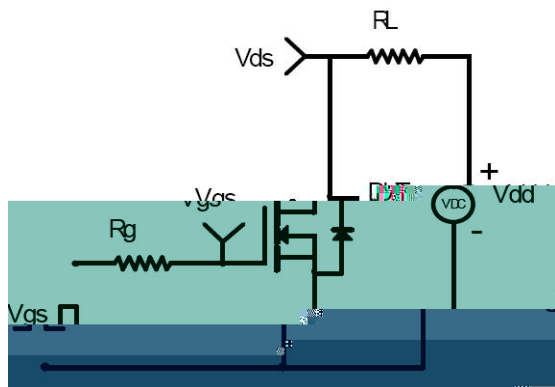
EAS Test Circuit:



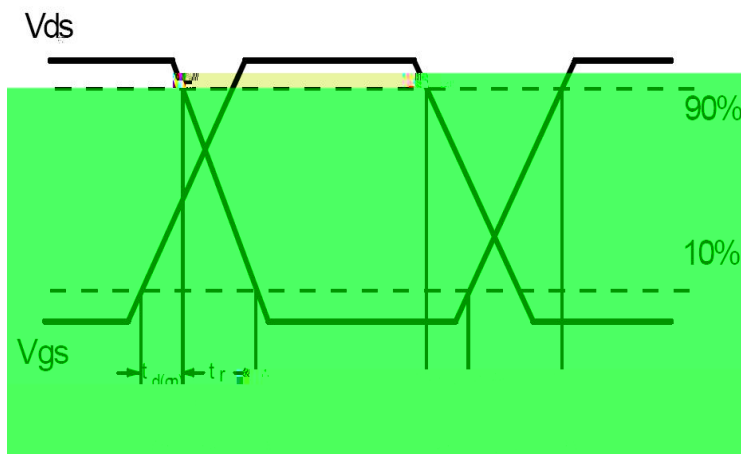
Gate Charge Test Circuit:



Switching Time Test Circuit:



Switching Waveforms:



### Notes:

Calculated continuous current based on maximum allowable junction temperature.

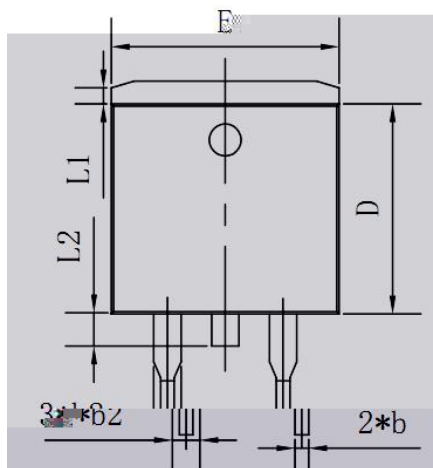
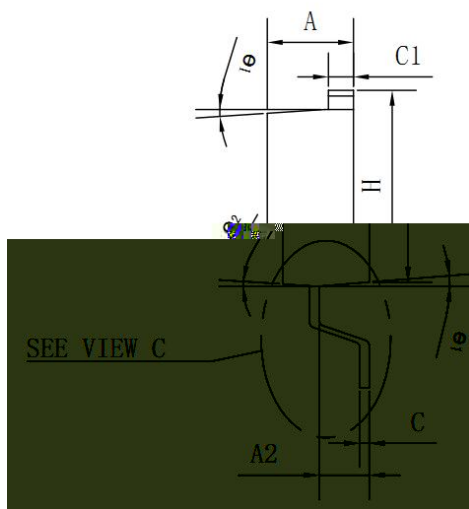
Repetitive rating; pulse width limited by max. junction temperature.

The power dissipation  $P_D$  is based on max. junction temperature, using junction-to-case thermal resistance.

**Mechanical Data**

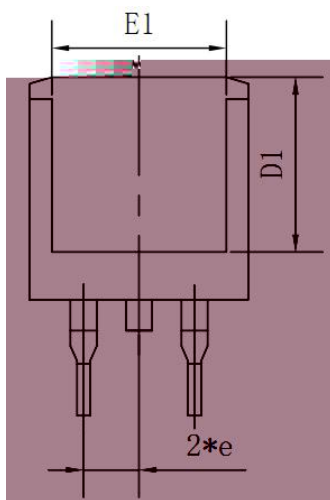
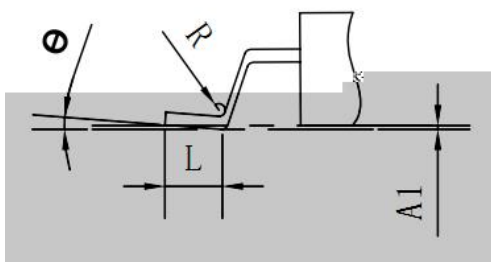
TO-263 Package Outline (Unit:mm)

Option 1

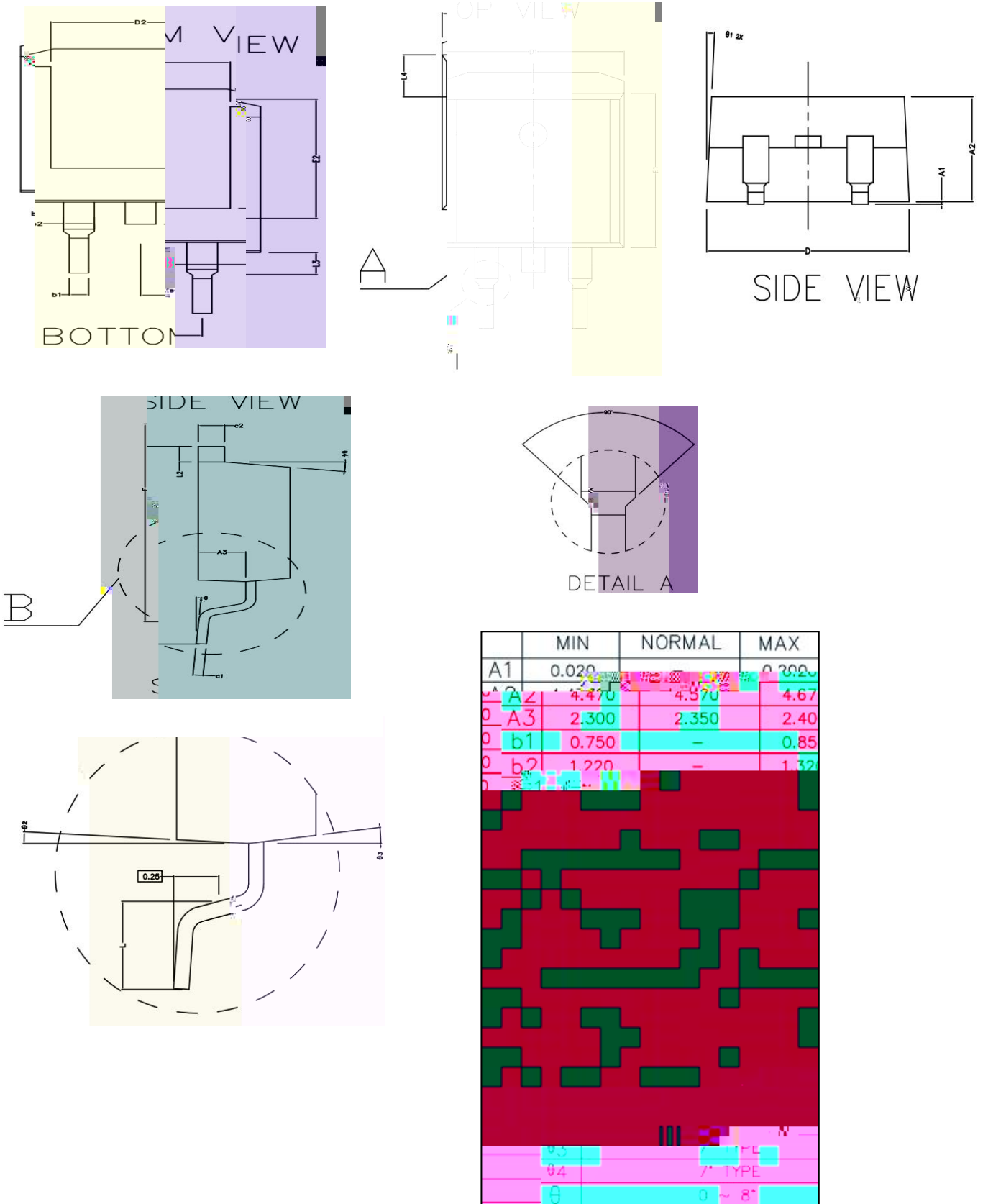


SYMBOL	MIN	NOM	MAX
A	4.35	4.47	4.60
A1	0.09	0.10	0.11
A2	2.30	2.40	2.50
b	0.70	0.80	1.00

b2	1.25	1.36	1.38
C	0.45	0.50	0.55
C1	1.29	1.30	1.31
D	9.10	9.20	9.30
D1	7.90	8.00	8.10
E	9.85	10.00	10.20
E1	7.90	8.00	8.10
H	15.30	15.50	15.70
e	-	2.54	-
L	2.34	2.38	2.42
L1	1.00	1.10	1.20
L2	1.30	1.40	1.50
R	0.24	0.25	0.26
e	0°	4°	8°
e1	4°	7°	10°
e2	0°	3°	6°



Option 2



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