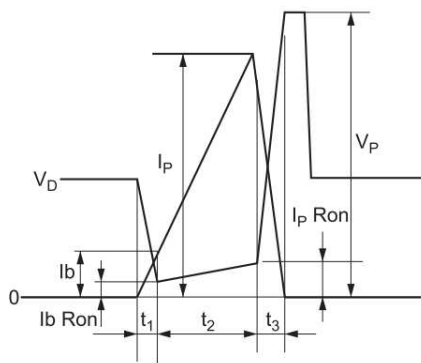


$P1=0.0002026W$   
 $P2=2.656W$   
 $P3=0.0002026W$     $P_{loss}=2.66W$

$R_{\theta ja}=35^{\circ}C/W$   
 $T_a=50^{\circ}C$

$\Rightarrow T_j=2.66W \times 35^{\circ}C/W + 50^{\circ}C = 143.1^{\circ}C$

POWER STAGE					
$R_{DS-ON}$	On-state resistance	$V_S > 5V, T_J = 25^{\circ}C$	80	100	mΩ
		$V_S > 5V, T_J = 150^{\circ}C$		166	mΩ
		$V_S = 3.5V, T_J = 25^{\circ}C$		120	mΩ
$I_{lim,nom}$	Internal current limit		7	13	A
		Internal current limit, thermal cycling condition		5	A



$$P_1 = \frac{1}{6} \cdot f \cdot t_1 (V_D \cdot I_b + 2I_b^2 \cdot R_{on}) \dots\dots\dots (1)$$

$$P_2 = \frac{1}{3} \cdot f \cdot t_2 \cdot R_{on} (I_p^2 + I_p \cdot I_b + I_b^2) \dots\dots\dots (2)$$

$$P_3 = \frac{1}{6} \cdot f \cdot t_3 (V_P \cdot I_p + 2I_p^2 \cdot R_{on}) \dots\dots\dots (3)$$