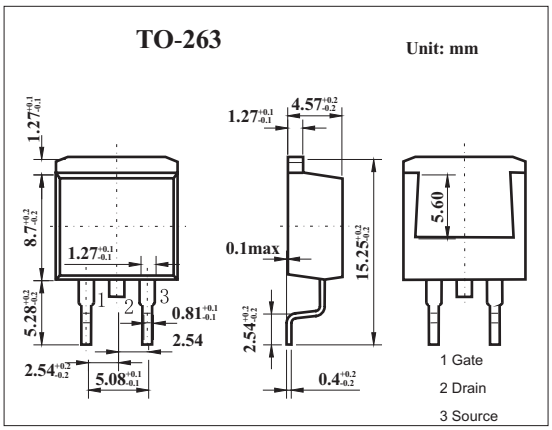
TY Semicondutor®

Product specification

2SK3322



■ Features

- Low gate charge

  Q_G = 15 nC TYP. (V_{DD} = 450V, V_{GS} = 10 V, I_D = 5.5A)
- Gate voltage rating ±30 V
- Low on-state resistance

  $R_{DS(on)}$ = 2.2Ω MAX. (V_{GS} = 10 V, I_D = 2.8A)
- Avalanche capability ratings

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	600	V
Gate to source voltage	V_{GSS}	±30	V
Drain current	I_D	±5.5	A
	I_{dp} *	±20	A
Power dissipation T_A=25℃ T_C=25℃	P_D	1.5 65	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤10μs,Duty Cycle≤1%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=600V,V_{GS}=0			100	μA
Gate leakage current	I_{GSS}	V_{GS}=±30V,V_{DS}=0			±10	μA
Gat cutoff voltage	$V_{GS(off)}$	V_{DS}=10V,I_D=1mA	2.5		3.5	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=10V,I_D=2.8A	1.0			S
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=10V,I_D=2.8A		1.7	2.2	Ω
Input capacitance	C_{iss}	V_{DS}=10V,V_{GS}=0,f=1MHZ		550		pF
Output capacitance	C_{oss}			115		pF
Reverse transfer capacitance	C_{rss}			13		pF
Turn-on delay time	t_{on}	I_D=2.8A,$V_{GS(on)}$=10V,R_G=10Ω,V_{DD}=150V		12		ns
Rise time	t_r			10		ns
Turn-off delay time	t_{off}			35		ns
Fall time	tf			12		ns