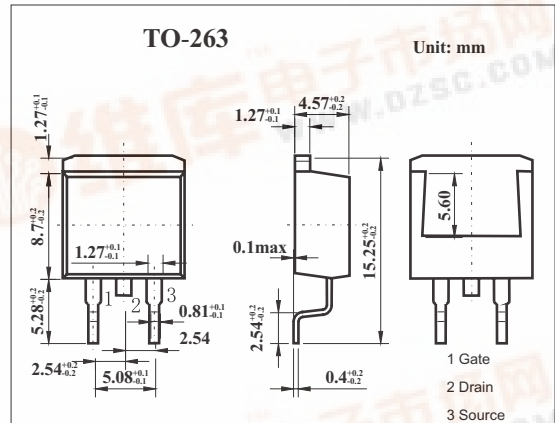


SMD Type MOSFET

MOS Field Effect Transistor  
2SK3353

■ Features

- Super low on-state resistance:  
RDS(on)1 = 9.5 mΩ MAX. (VGS = 10 V, ID = 41 A)  
RDS(on)2 = 14 mΩ MAX. (VGS = 4 V, ID = 41 A)
- Low Ciss: Ciss = 4650 pF TYP.
- Built-in gate protection diode



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V <sub>DSS</sub>	60	V
Gate to source voltage	V <sub>GSS(AC)</sub>	±20	V
Drain current	I <sub>D</sub>	±82	A
	I <sub>DP</sub> *	±328	A
Power dissipation	P <sub>D</sub>	T <sub>A</sub> =25°C	1.5
		T <sub>C</sub> =25°C	95
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW ≤ 10 μs, Duty Cycle ≤ 1%

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I <sub>DSS</sub>	V <sub>DS</sub> =60V, V <sub>GS</sub> =0			100	μA
Gate leakage current	I <sub>GSS</sub>	V <sub>GS</sub> =±20V, V <sub>DS</sub> =0			±10	μA
Gate cutoff voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1mA	2.5		3.5	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =41A	30	50		S
Drain to source on-state resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> =10V, I <sub>D</sub> =41A		7.5	9.5	mΩ
		V <sub>GS</sub> =4V, I <sub>D</sub> =41A		10.5	14	mΩ
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1MHZ		4650		pF
Output capacitance	C <sub>oss</sub>			780		pF
Reverse transfer capacitance	C <sub>rss</sub>			380		pF
Turn-on delay time	t <sub>on</sub>				100	ns
Rise time	t <sub>r</sub>	I <sub>D</sub> =41A, V <sub>GS(on)</sub> =10V, R <sub>G</sub> =10Ω, V <sub>DD</sub> =30V		1550		ns
Turn-off delay time	t <sub>off</sub>			280		ns
Fall time	t <sub>f</sub>			420		ns
Total Gate Charge	Q <sub>G</sub>				90	
Gate to Source Charge	Q <sub>GS</sub>	V <sub>DD</sub> = 42V, V <sub>GS</sub> = 10 V, I <sub>D</sub> = 82A		14		nC
Gate to Drain Charge	Q <sub>GD</sub>			38		nC

