

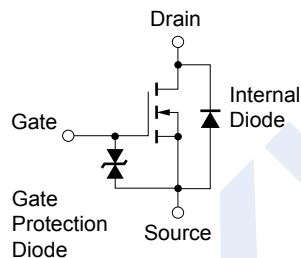
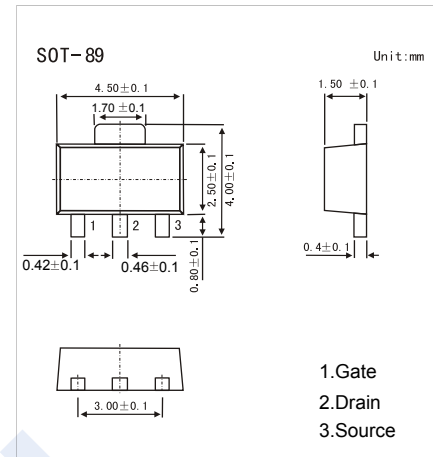
N-Channel MOSFET

2SK2857-HF

■ Features

- $V_{DS} (V) = 60V$
- $I_D = 4 A$
- $R_{DS(ON)} < 150m\Omega$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 220m\Omega$ ($V_{GS} = 4V$)
- Pb-Free Package May be Available.

The G-Suffix Denotes a Pb-Free Lead Finish



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	4	A
Pulsed Drain Current (Note.1)	I_{DM}	16	
Power Dissipation	P_D	2	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: $PW \leq 10\mu s$, Duty Cycle $\leq 1\%$

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■ Electrical Characteristics Ta = 25°C

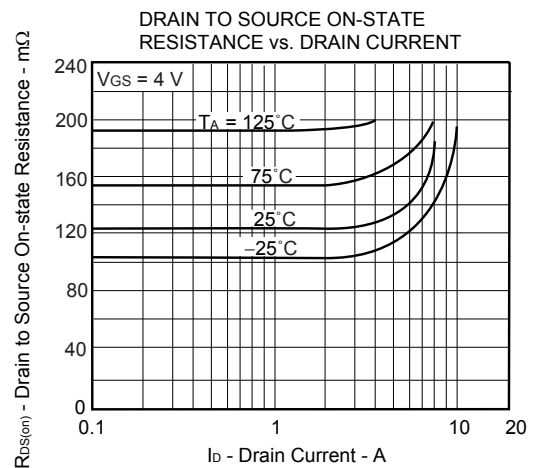
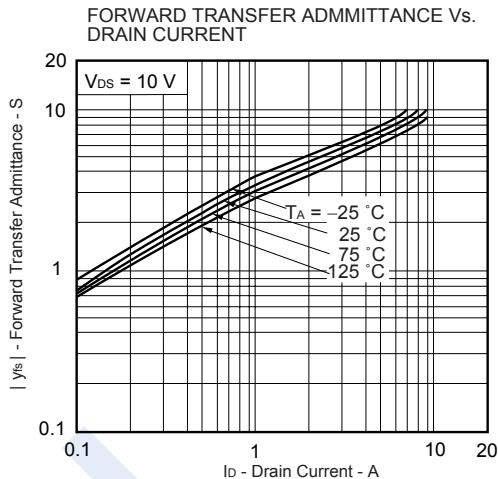
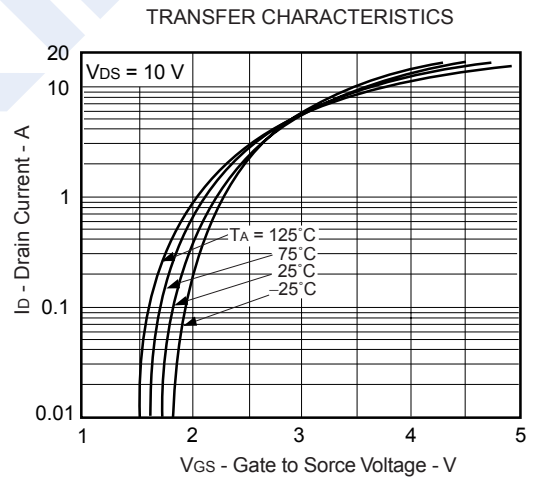
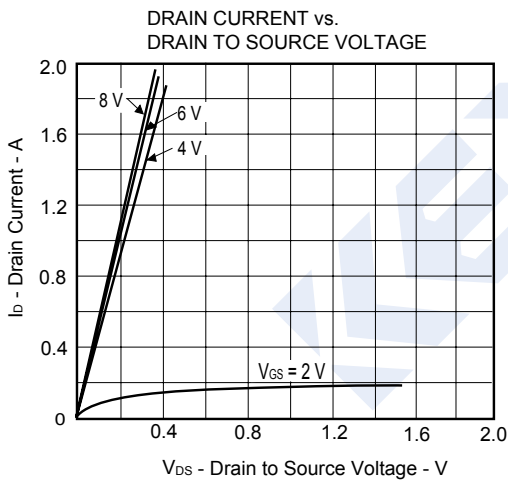
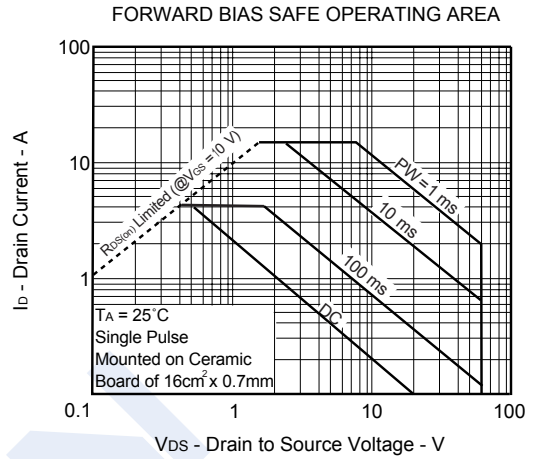
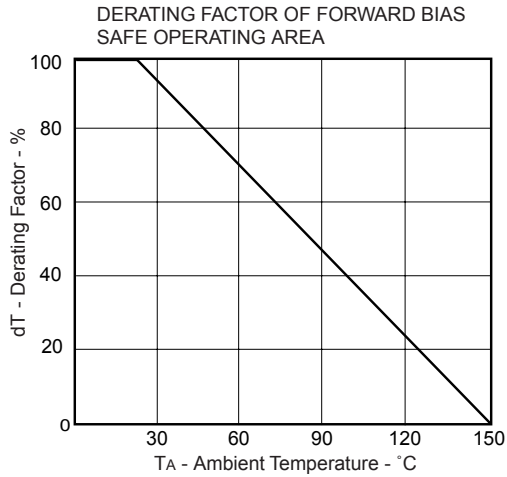
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =250 μA, V _{GS} =0V	60			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			10	μA
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±10	μA
Gate Cutt-off Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	1		2	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =2.5A			150	mΩ
		V _{GS} =4V, I _D =1.5A			220	
Forward Transconductance	g _{FS}	V _{DS} =10V, I _D =2A	1			S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =10V, f=1MHz		265		pF
Output Capacitance	C _{oss}			125		
Reverse Transfer Capacitance	C _{rss}			56		
Total Gate Charge	Q _g	V _{DS} = 48 V, V _{GS} = 10 V, I _D = 4 A		10.6		nC
Gate to Source Charge	Q _{gS}			0.7		
Gate to Drain Charge	Q _{gd}			3.5		
Turn-On DelayTime	t _{d(on)}	V _{GS(on)} =10V, V _{DS} =25V, I _D =1A, R _L =25 Ω, R _G =10 Ω		8		ns
Turn-On Rise Time	t _r			11		
Turn-Off DelayTime	t _{d(off)}			52		
Turn-Off Fall Time	t _f			22		
Body Diode Reverse Recovery Time	t _{rr}			49		
Body Diode Reverse Recovery Charge	Q _{rr}	I _F = 4A, V _{GS} =0, di/dt= 50 A/μs		26.6		nC
Diode Forward Voltage	V _{SD}	I _S =4A, V _{GS} =0V		0.86		V

■ Marking

Marking	NX F
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Typical Characteristics



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