

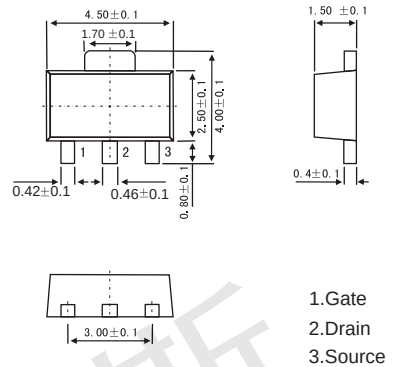
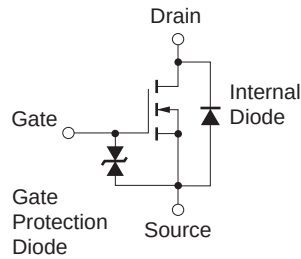
SOT-89

Features

- $V_{DS} (V) = 60V$
- $I_D = 4 A$
- $R_{DS(ON)} < 150m\Omega$ ($V_{GS} = 10V$)
- $R_{DS(ON)} < 220m\Omega$ ($V_{GS} = 4V$)

Marking

Marking NX



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

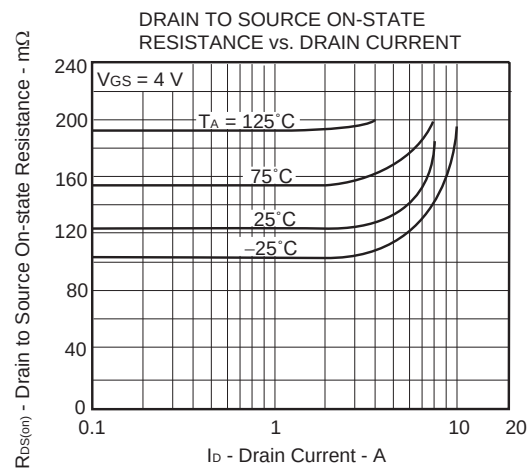
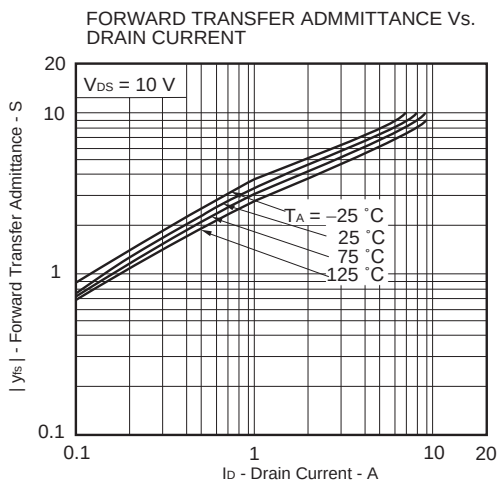
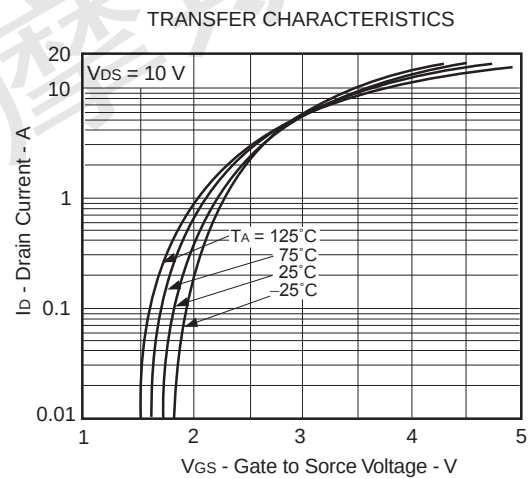
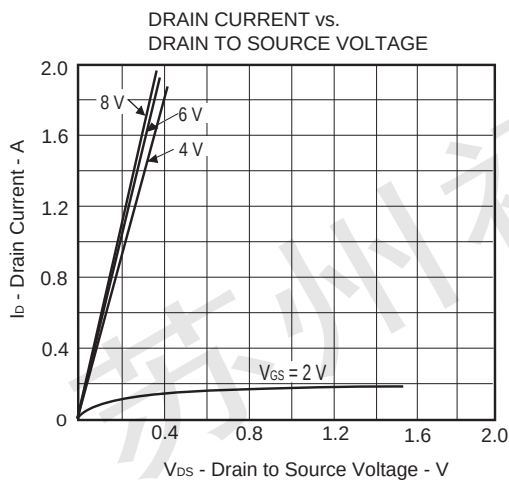
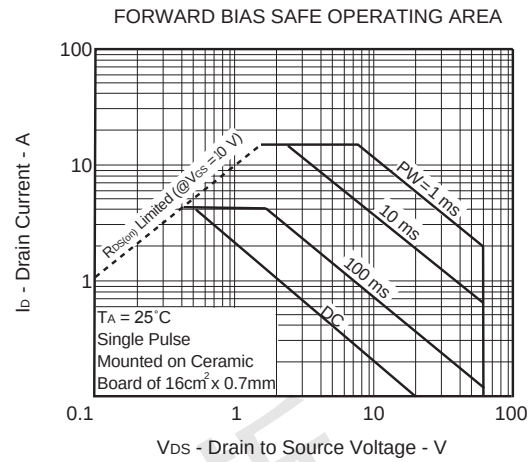
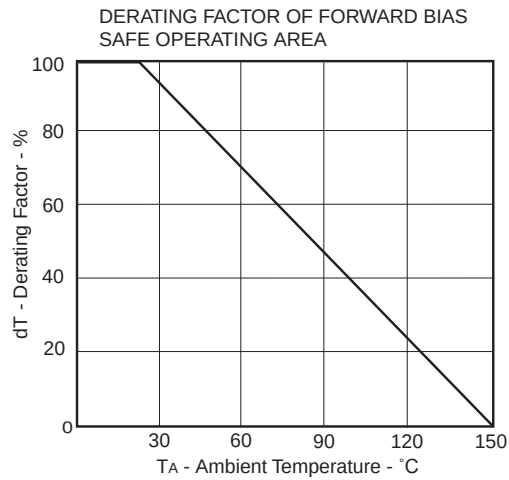
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	4	A
Pulsed Drain Current (Note.1)	I_{DM}	16	
Power Dissipation	P_D	2	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

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

Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = 250\mu A$, $V_{GS} = 0V$	60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 60V$, $V_{GS} = 0V$			10	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 20V$			± 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	$m\Omega$
		$V_{GS} = 4V$, $I_D = 1.5A$			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	$V_{DS} = 48V$, $V_{GS} = 10V$, $I_D = 4A$		10.6		nC
Gate to Source Charge	Q_{gS}			0.7		
Gate to Drain Charge	Q_{gD}			3.5		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)} = 10V$, $V_{DS} = 25V$, $I_D = 1A$, $R_L = 25\Omega$, $R_G = 10\Omega$		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}	$I_F = 4A$, $V_{GS} = 0$, $dI/dt = 50 A/\mu s$		49		nC
Body Diode Reverse Recovery Charge	Q_{rr}			26.6		
Diode Forward Voltage	V_{SD}	$I_S = 4A$, $V_{GS} = 0V$		0.86		V

Typical Characteristics



Typical Characteristics

