



HSK2474J

N - Channel MOSFETs

Description

- Dynamic dv/dt Rating
- Repetitive Avalanche rated
- Surface Mount
- Straigh Lead
- Available in Tape&Reel
- Fast Switching
- Ease of Paralleling

Features

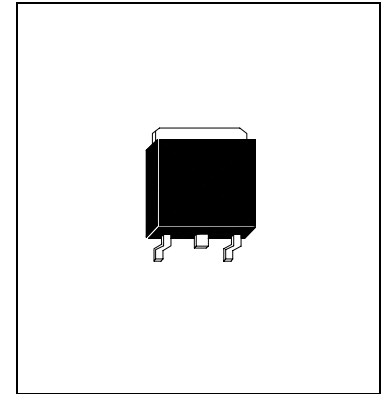
- Low Drain-Source ON Resistance - $R_{DS(ON)}=1.2\Omega(\text{Typ.})@ V_{DS}=10V, I_D=1.3A$
- High Forward Transfer Admittance $-|Y_{fs}|=1.2S@V_{DS}=50V, I_D=1.3A$
- Low Leakage Current - $I_{DSS}=100\mu A (\text{Max.})@V_{DS}=200V$
- Enhancement-Mode - $V_{th} = 2.0\sim 4.0V@V_{DS}=4V, I_D=250\mu A$

Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
 - Storage Temperature -55 ~ +150 °C
 - Junction Temperature +150 °C
- Maximum Power Dissipation
 - Total Power Dissipation (Tc=25°C) 25 W
- Maximum Voltages and Currents
 - Drain to Source Breakdown Voltage 250 V
 - Drain to Gate Breakdown Voltage..... 250 V
 - Gate to Source Voltage..... ± 20 V
 - Drain Current (Cont.) 2.2 A
 - Drain Current (Pluse.)..... 8.8 A

Thermal Characteristics

Characteristic	Symbol	Max.	Units
Junction to Case	$R_{\theta JC}$	5	°C/W
Junction to Ambient	$R_{\theta JA}$	50	°C/W



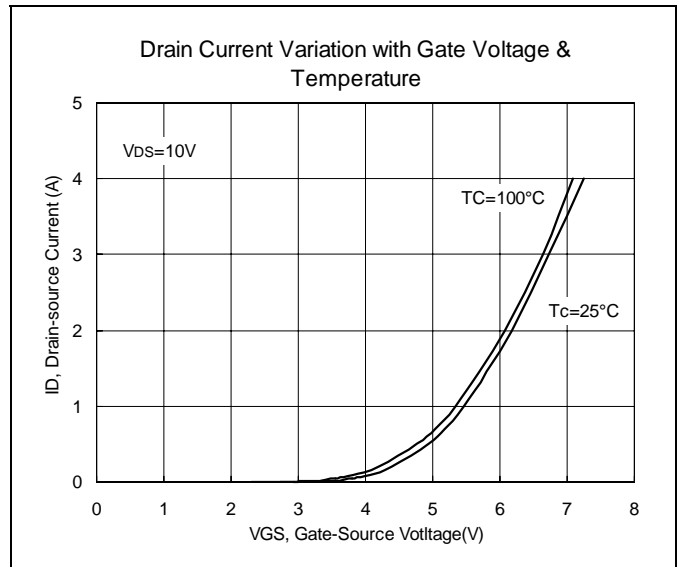
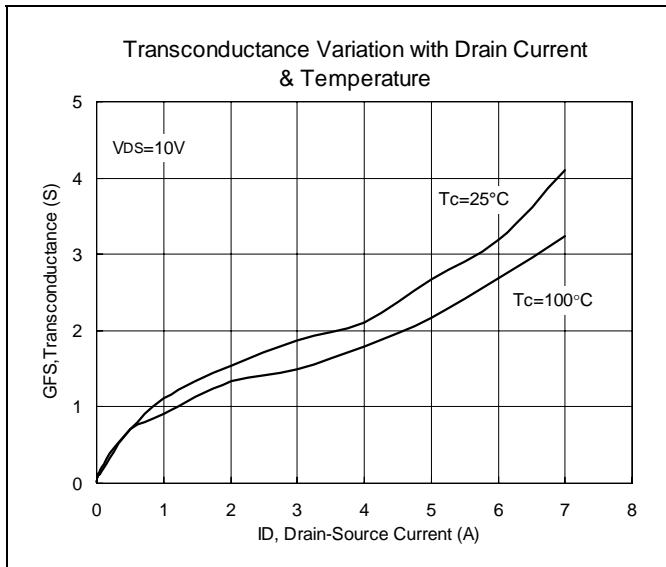
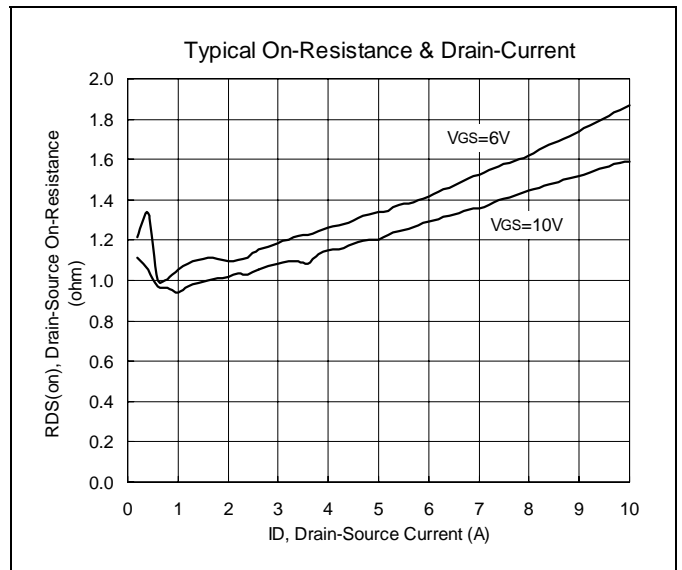
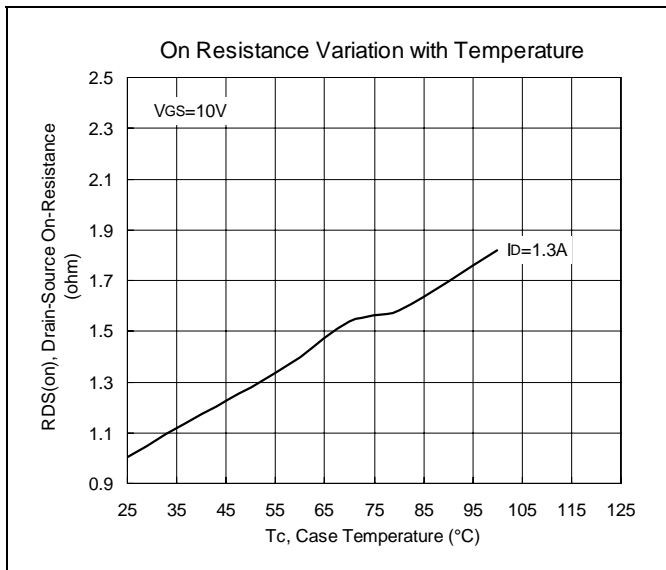
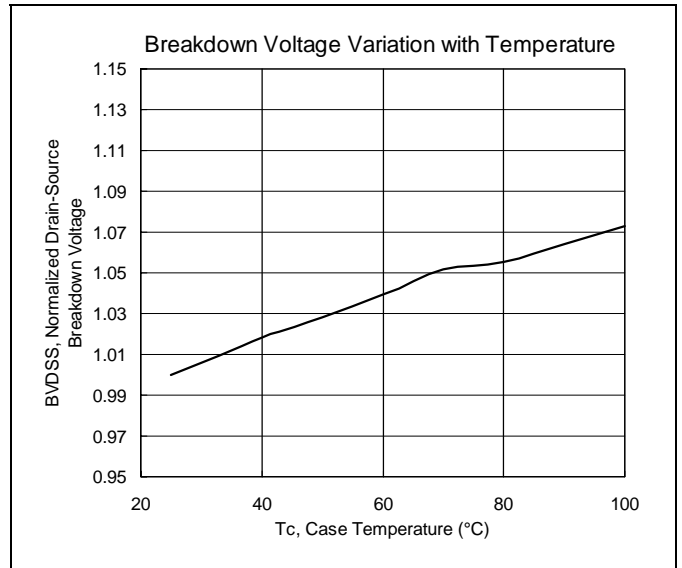
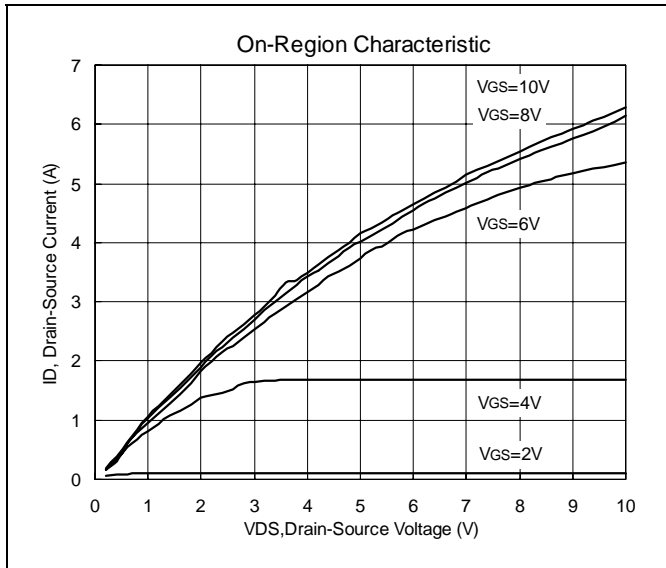


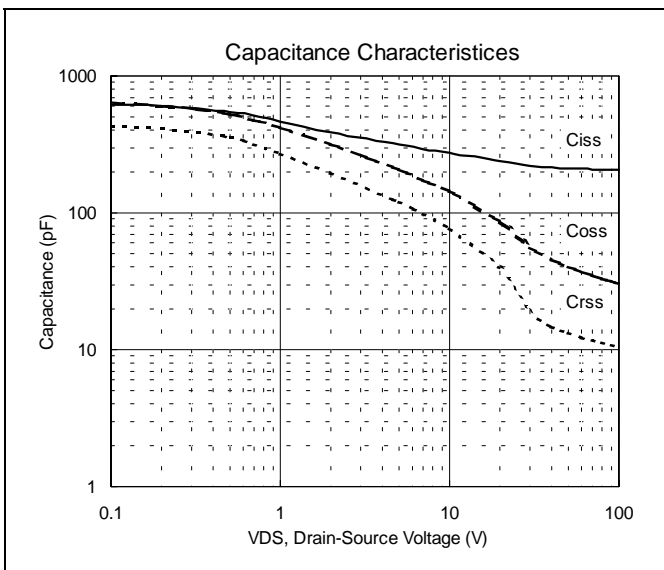
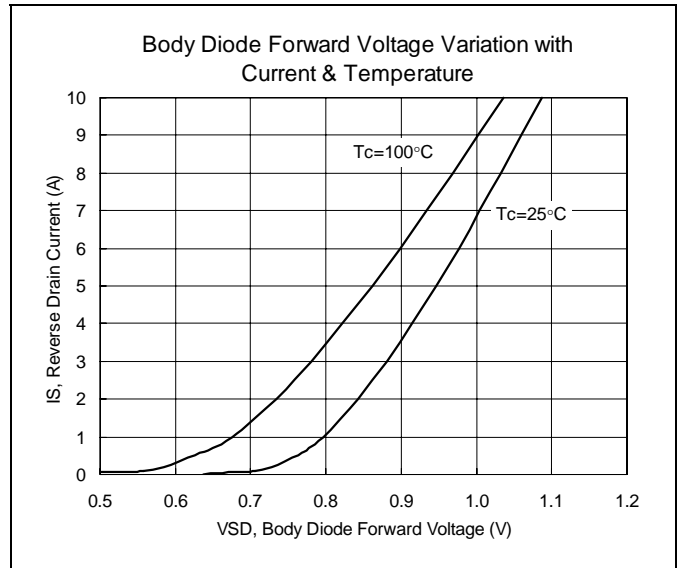
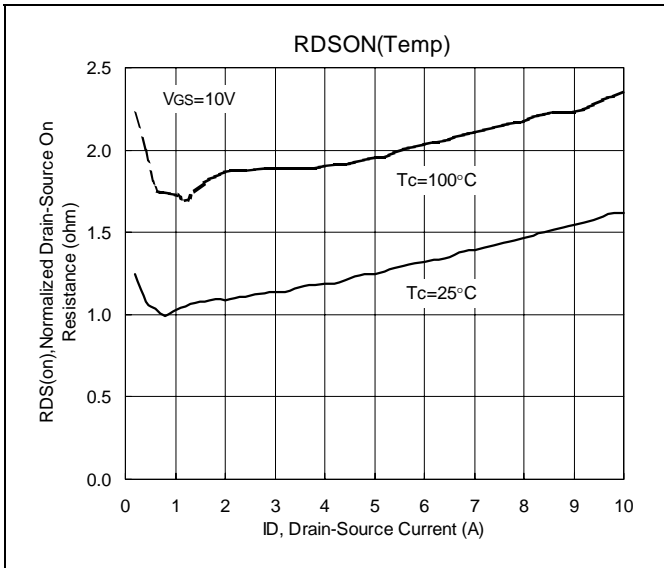
Electrical Characteristics (Ta=25°C)

Characteristics	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	250	-	-	V	$I_D=250\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	2.0	-	4.0	V	$V_{DS}=4V, I_D=250\mu A$
Drain Cut-Off Current	I_{DSS}	-	-	25	μA	$V_{DS}=200V$
Gate Leakage Current	I_{GSS}	-	-	± 100	μA	$V_{GS}=\pm 20V$
Forward Transconductance	g_{fs}	0.80	1.2	-		$V_{DS}=50V, I_D=1.3A$
Drain-Source ON Resistance	$R_{DS(ON)}$	-	1.2	2.0	Ω	$V_{GS}=10V, I_D=1.3A$
Input Capacitance	C_{iss}	-	280	-	pF	$V_{DS}=10V, V_{GS}=0V$ $f=1.0MHz$
Reverse Transfer Capacitance	C_{rss}	-	30	-	pF	
Output Capacitance	C_{oss}	-	42	-	pF	
Switching Time	t_r	-	45	-	nS	$V_{DD}=100V, I_D=1.0A$ $R_G=24\Omega, R_D=45\Omega$
	t_{on}	-	30	-		
	t_f	-	45	-		
	T_{off}	-	135	-		
Total Gate Charge (Gate-Source Plus Gate-Drain)	Q_g	-	-	8.2	nC	$I_D=2.7A, V_{DS}=200V$ $V_{GS}=10V$
Gate-Source Charge	Q_{gs}	-	-	1.8	nC	
Gate-Drain Charge (Miller)	Q_{gd}	-	-	4.5	nC	



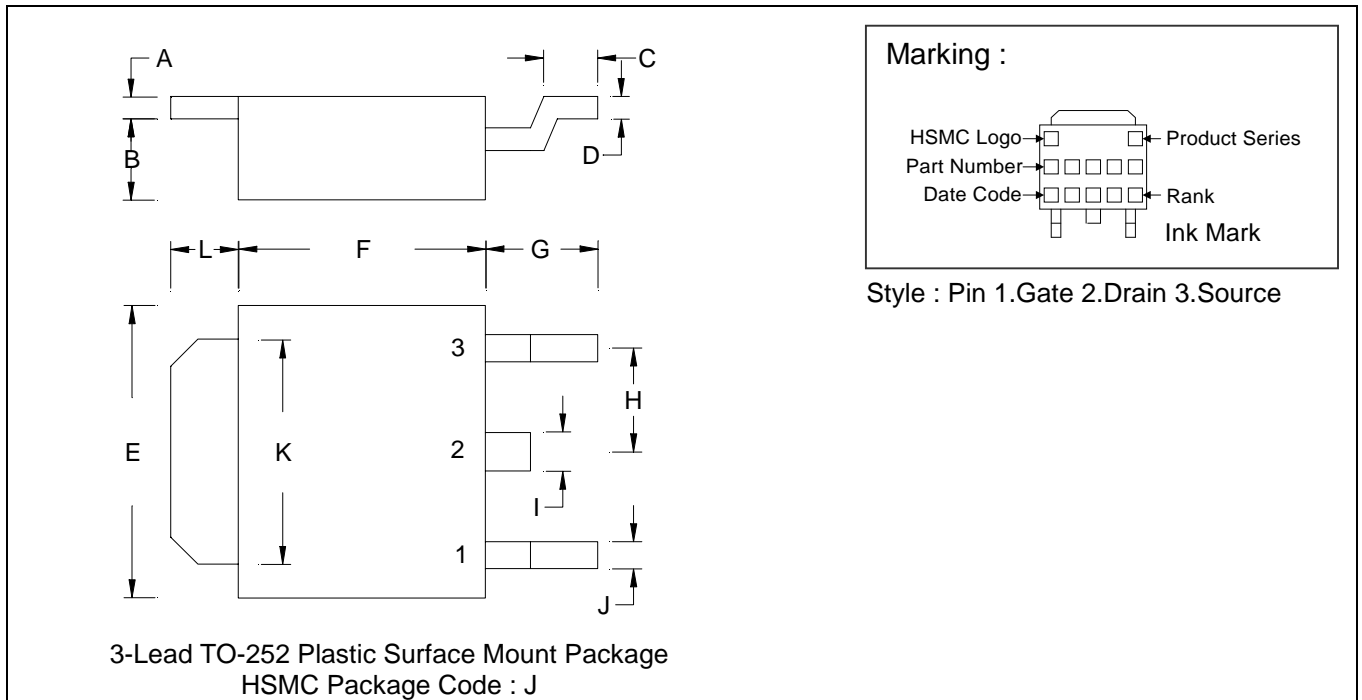
Characteristics Curve







TO-252 Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0177	0.0217	0.45	0.55	G	0.0866	0.1102	2.20	2.80
B	0.0650	0.0768	1.65	1.95	H	-	*0.0906	-	*2.30
C	0.0354	0.0591	0.90	1.50	I	-	0.0354	-	0.90
D	0.0177	0.0236	0.45	0.60	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2125	0.2283	5.40	5.80	L	0.0551	0.0630	1.40	1.60

Notes : 1.Dimension and tolerance based on our Spec. dated May. 05,1996.
 2.Controlling dimension : millimeters.
 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material :

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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