- V_{DS} 60V
- I_D 300mA
- $R_{DS(ON)}$(at V_{GS}=10V) 2.5ohm
- $R_{DS(ON)}$(at V_{GS}=4.5V) 3.0ohm
- Gate-Source ESD Rating Up to 2KV (HBM)

- Trench Power MV MOSFET technology
- Voltage controlled small signal switch
- Low input Capacitance
- Fast Switching Speed
- Low Input / Output Leakage
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

- DC/DC Converter
- Load Switch for Portable Devices

■ (T_A=25 unless otherwise noted)

Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	±20	V
Drain Current	T_A=25 @ Steady State	I_D	300	mA
	T_A=70 @ Steady State		240	
Pulsed Drain Current [A]		I_{DM}	1.5	A
Total Power Dissipation @ T_A=25		P_D	250	mW
Thermal Resistance Junction-to-Ambient @ Steady State [B]		$R_{\theta JA}$	500	/ W
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	

■ (Example)

■ (T_J=25 unless otherwise noted)

Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}= 0V, I_D=250μA	60			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=60V,V_{GS}=0V			1	μA
Gate-Body Leakage Current	I_{GSS}	V_{GS}= ±20V, V_{DS}=0V			±10	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}= V_{GS}, I_D=250μA	1	1.5	2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}= 10V, I_D=300mA		1.9	2.5	Ω
		V_{GS}= 4.5V, I_D=200mA		2.0	3.0	
Diode Forward Voltage	V_{SD}	I_S=300mA,V_{GS}=0V			1.2	V
Maximum Body-Diode Continuous Current	I_S			GS	300	mA
Forward Transconductance	g_{FS}	V_{DS}=5V,I_D=0.3A		0.13		S
Input Capacitance	rφ C_{iss}	V_{DS}=30V,V_{GS}=0V,f=1MHZ		21		pF
Output Capacitance	C_{oss}			9		
Reverse Transfer Capacitance	C_{rss}			4		
Total Gate Charge	Q_g	V_{GS}=10V,VDS=30V,ID=0.3A		1.22	2.4	g
GatenD ᴰ p ʊ ɹ M p hange						

v 7\SLFDO 3HUIRUPDQFH &KDUDFWHULVWLFV

)LJXUH 2XWSXW &KDUDFWHULVWLFV

)LJXUH 7UDQVIHU &KDUDFWHULVW

)LJXUH &DSDFLWDQFH &KDUDFWHULVWLFV

)LJXUH *DWH &KDU

)LJXUH 'UDLQ 6RXUFH RQ 5HVLVWDQFH

)LJXUH 'UDLQ 6RXUFH RQ 5

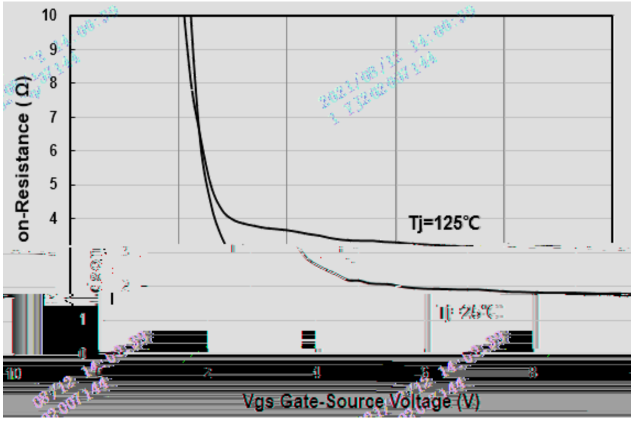

Figure7. On-Resistance vs V_{GS}

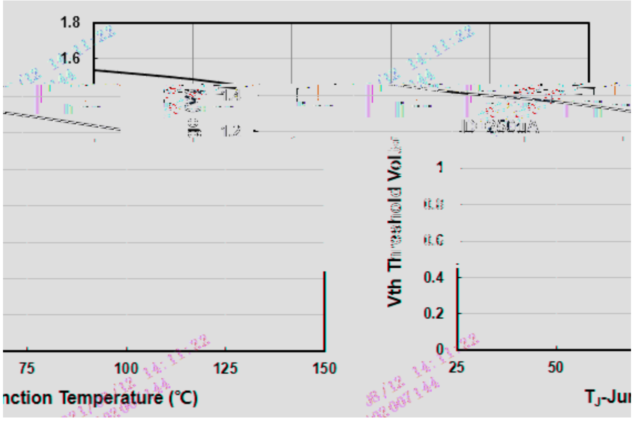

Figure8. Threshold Voltage vs Temperature

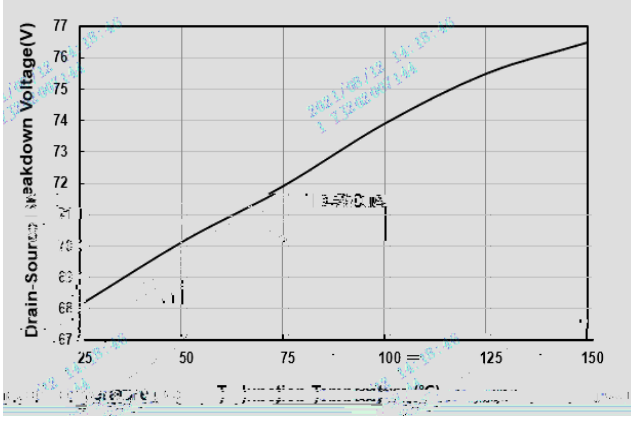

Figure9. Breakdown Voltage vs Temperature

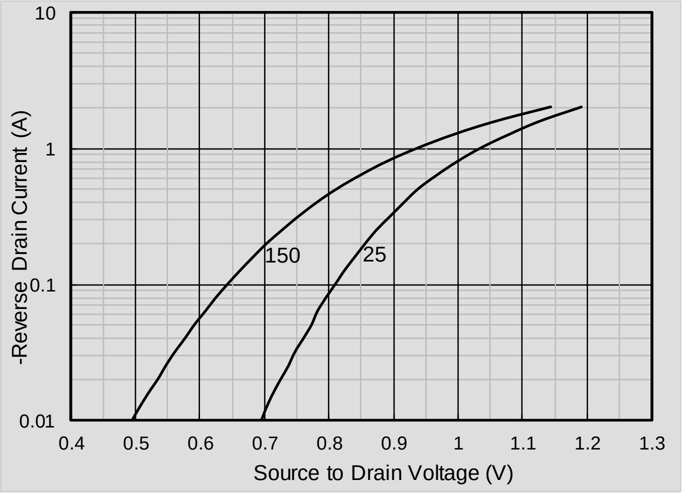

Figure 10. Forward characteristics of reverse diode

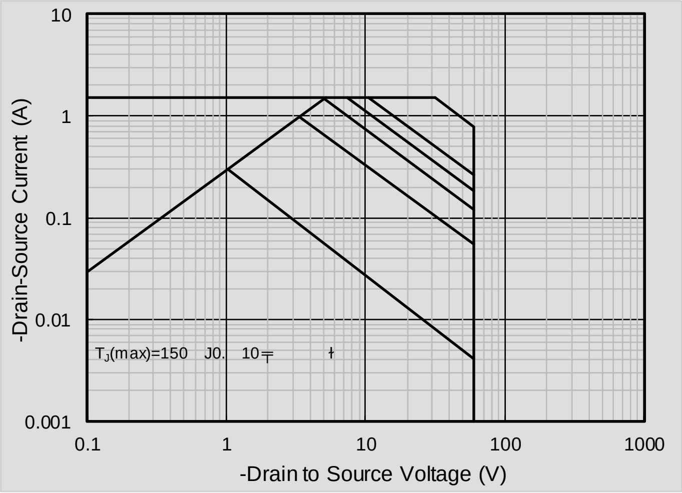

Figure 11. Safe Operation Area