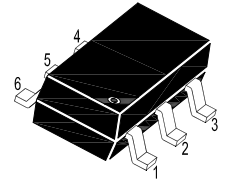
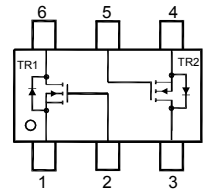


■ N-Channel Enhancement Mode Field Effect Transistor


1. Source 2. Gate 3. Drain
4. Source 5. Gate 6. Drain

■ Simplified outline(SOT-363)
■ Absolute Maximum Ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit
Drain Source Voltage	V _{DSS}	60	V
Drain Gate Voltage (R _{GS} ≤ 1 MΩ)	V _{DGR}	60	V
Gate Source Voltage	V _{GSS}	± 20	V
		± 40	
Drain Current	I _D	115	mA
		800	
Total Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{Stg}	- 55 to + 150	°C

■ Characteristics at T_a = 25°C

Parameter	Symbol	Min.	Max.	Unit
Drain Source Breakdown Voltage at I _D = 10 μA	BV _{DSS}	60	-	V
Zero Gate Voltage Drain Current at V _{DS} = 60 V	I _{DSS}	-	1	μA
Gate Source Leakage Current at ± V _{GS} = 20 V	±I _{GSS}	-	100	nA
Gate Source Threshold Voltage at V _{DS} = V _{GS} = 10 V, I _D = 250 μA	V _{GS(th)}	1	2.5	V
Static Drain Source On Resistance at V _{GS} = 5 V, I _D = 50 mA at V _{GS} = 10 V, I _D = 500 mA	R _{DS(ON)}	-	7.5	Ω
		-	7.5	
Drain Source On Voltage at V _{GS} = 5 V, I _D = 50 mA at V _{GS} = 10 V, I _D = 500 mA	V _{DS(ON)}	-	1.5	V
		-	3.75	
Forward Transconductance at V _{DS} = 10 V, I _D = 200 mA	g _{FS}	80	-	mS
Input Capacitance at V _{DS} = 25 V, f = 1 MHz	C _{iss}	-	50	pF
Output Capacitance at V _{DS} = 25 V, f = 1 MHz	C _{oss}	-	25	pF
Reverse Transfer Capacitance at V _{DS} = 25 V, f = 1 MHz	C _{rss}	-	5	pF
Turn On Time at V _{DD} = 30V, R _L = 150Ω, I _D = 0.2A, V _{GS} = 10V, R _{GEN} = 25Ω	t _{on}	-	20	ns
Turn Off Time at V _{DD} = 30V, R _L = 150Ω, I _D = 0.2A, V _{GS} = 10V, R _{GEN} = 25Ω	t _{off}	-	20	ns

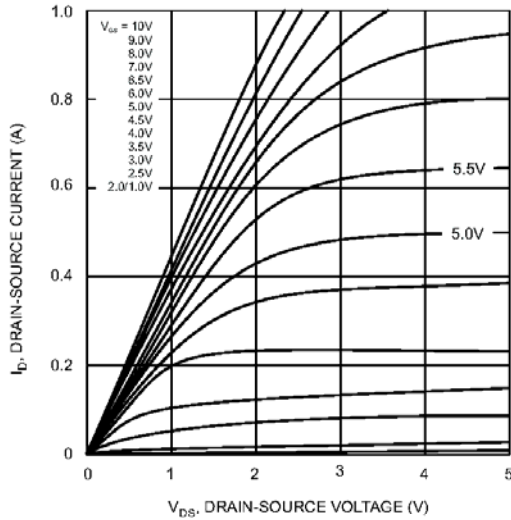


Fig. 1 On-Region Characteristics

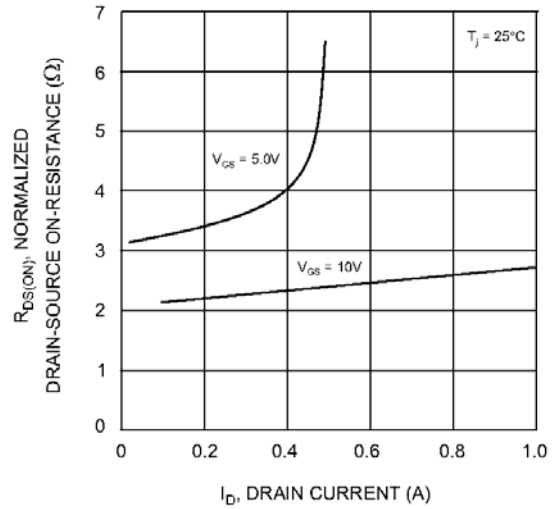


Fig. 2 On-Resistance vs Drain Current

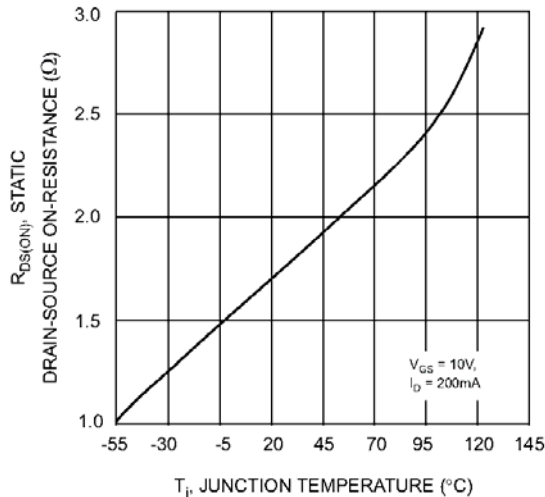


Fig. 3 On-Resistance vs Junction Temperature

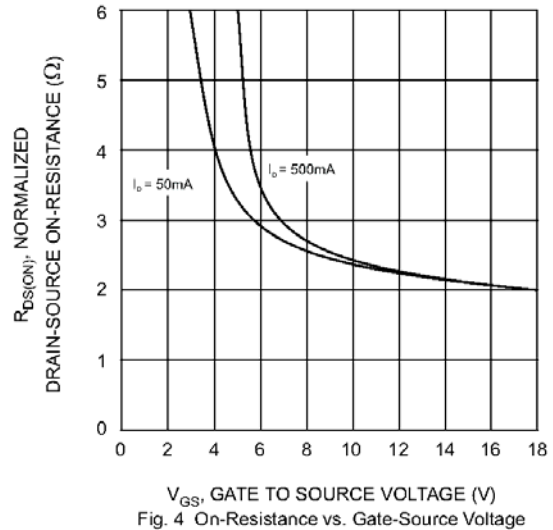


Fig. 4 On-Resistance vs. Gate-Source Voltage

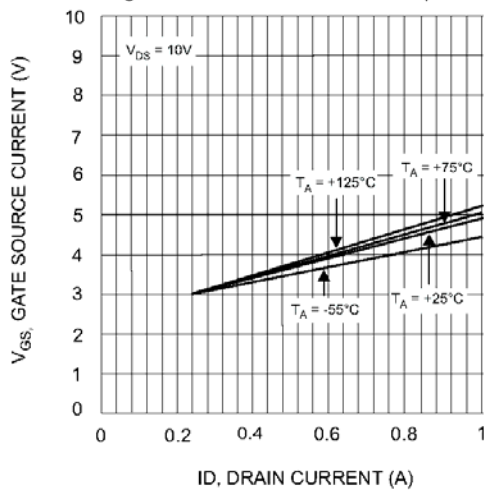
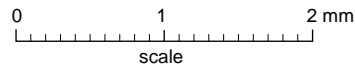
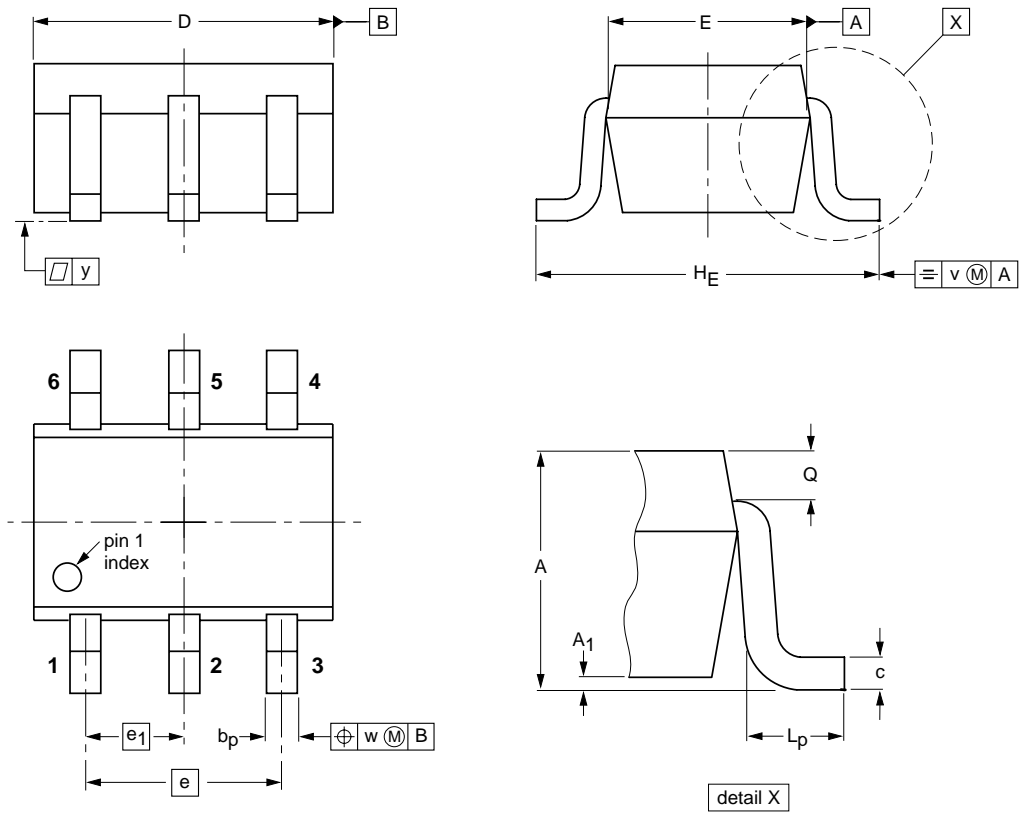


Fig. 5 Typical Transfer Characteristics

Package Outline

SOT-363



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-363	Tape/Reel, 7" reel	3000	EIA-481-1