

# 2SJ425

External dimensions 1 ..... FM20

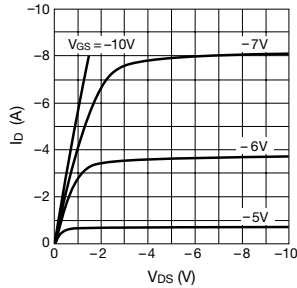
## Absolute Maximum Ratings (Ta = 25°C)

Symbol	Rated	Unit
V <sub>DSS</sub>	-60	V
V <sub>GSS</sub>	±20	V
I <sub>D</sub>	±8	A
I <sub>D</sub> (pulse)	±32 (T <sub>ch</sub> ≤ 150°C)	A
P <sub>D</sub>	30 (T <sub>c</sub> = 25°C)	W
T <sub>ch</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

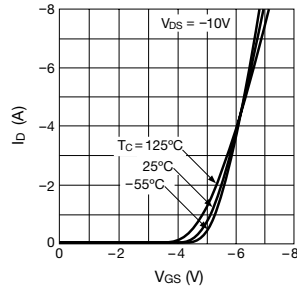
## Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V <sub>(BR)</sub> DSS	-60			V	I <sub>D</sub> = -250μA, V <sub>GS</sub> = 0V
I <sub>GSS</sub>		±500		nA	V <sub>DS</sub> = ±20V
I <sub>DSS</sub>			-250	μA	V <sub>DS</sub> = -60V, V <sub>GS</sub> = 0V
V <sub>TH</sub>	-2.0		-4.0	V	V <sub>DS</sub> = -10V, I <sub>D</sub> = -250μA
Re (yfs)	1.8	2.8		S	V <sub>DS</sub> = -10V, I <sub>D</sub> = -4.0A
R <sub>DS</sub> (on)		0.2	0.28	Ω	V <sub>GS</sub> = -10V, I <sub>D</sub> = -4.0A
C <sub>iss</sub>		580		pF	V <sub>DS</sub> = -25V, f = 1.0MHz, V <sub>GS</sub> = 0V
C <sub>oss</sub>		360		pF	
t <sub>on</sub>		90		ns	I <sub>D</sub> = -4.0A, V <sub>DD</sub> = -30V, V <sub>GS</sub> = -10V, See Figure 3 on Page 5.
t <sub>off</sub>		45		ns	

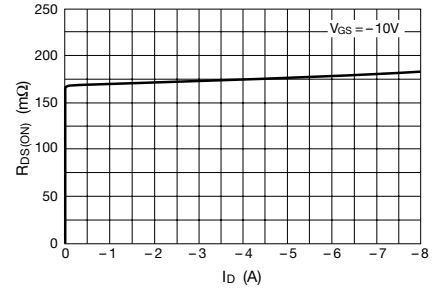
V<sub>DS</sub> — I<sub>D</sub> Characteristics



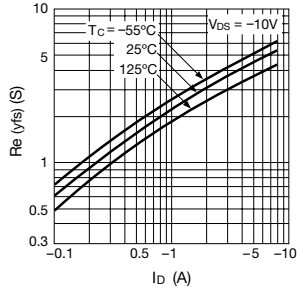
V<sub>GS</sub> — I<sub>D</sub> Characteristics



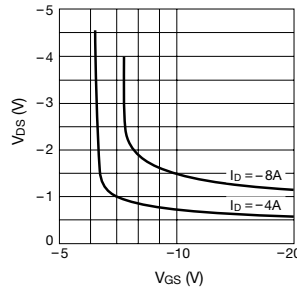
I<sub>D</sub> — R<sub>DS</sub> (ON) Characteristics



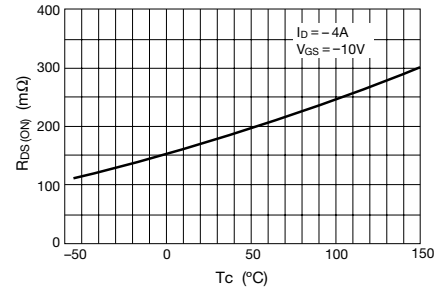
I<sub>D</sub> — Re (yfs) Characteristics



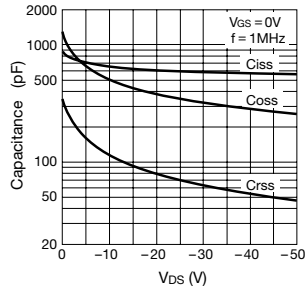
V<sub>GS</sub> — V<sub>DS</sub> Characteristics



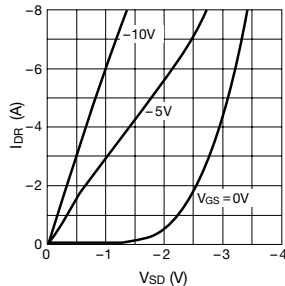
T<sub>c</sub> — R<sub>DS</sub> (ON) Characteristics



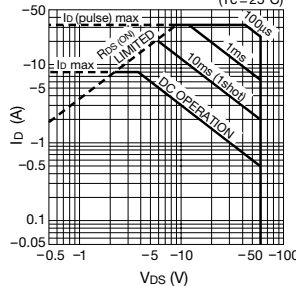
V<sub>DS</sub> — Capacitance Characteristics



V<sub>SD</sub> — I<sub>DR</sub> Characteristics



Safe Operating Area (T<sub>c</sub> = 25°C)



T<sub>a</sub> — P<sub>D</sub> Characteristics

