VRW0696 ḾḾÞ QSQ ÆṀч s ‖ ㄱ Grxe℗h silicon NPN transistor in a SOT-363 Plastic Package.

ﻮ Ɔ ‖ Ɔ ㄴ ı ز 933 p D ṇ ƒ ß
Collector currents up to 600 mA.

v ̈Ọ Parameter	ϒ N Symbol	̈Ọ Ö Rating	D Ꮋ Unit
Collector to Base Voltage	V_{CBO}	75	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	600	mA
Total Package Dissipation Note1	P_D	150	mW
Junction Temperature	T_j	-55 +150	
Storage Temperature Range	T_{stg}	-55 +150	

Note1 χ Device mounted on FR4 glass epoxy printed circuit board using the minimum recommended footprint.

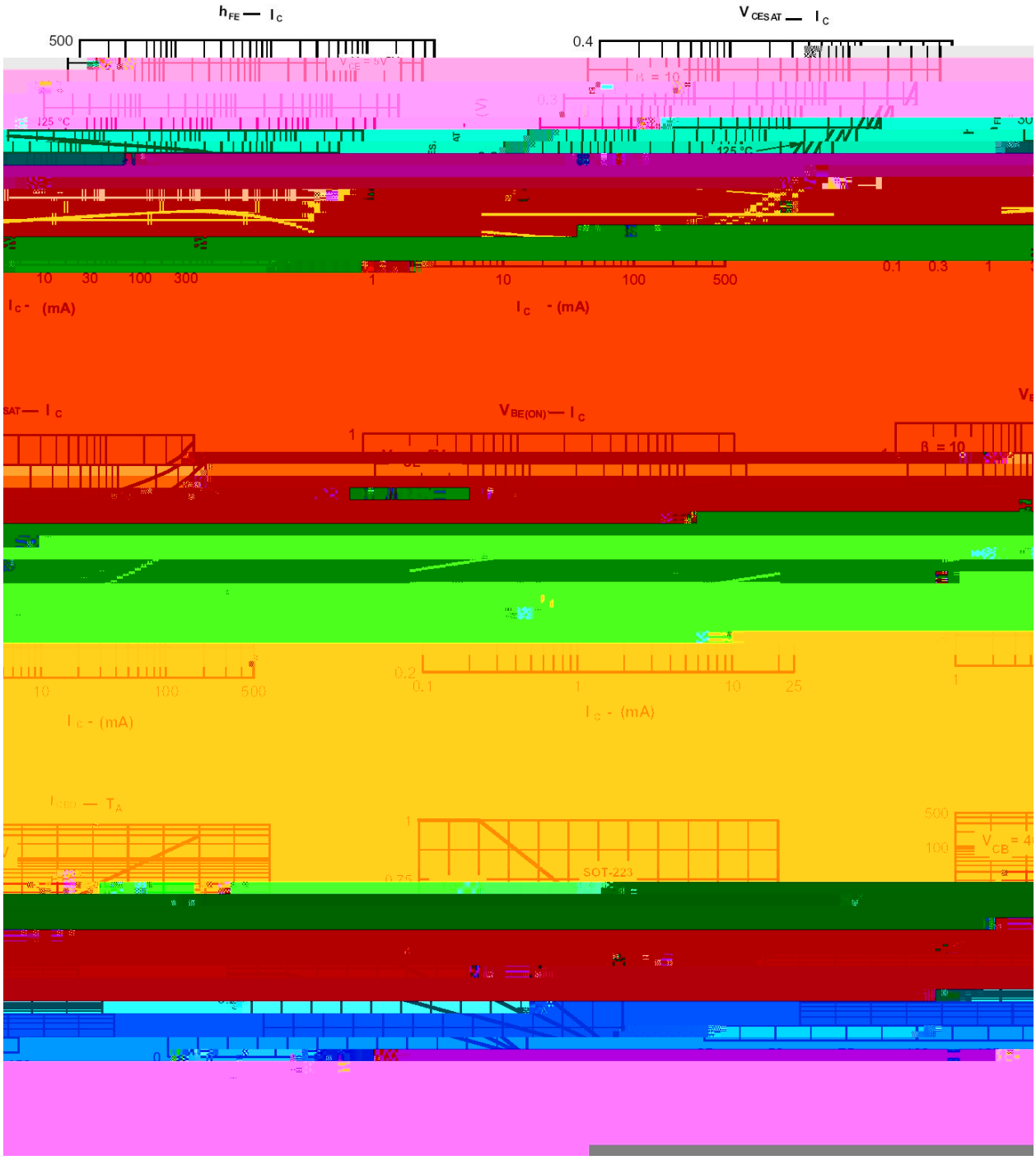
v ̈Ọ Parameter	ϒ N Symbol	‗ :ϯ Ţ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ᶻ Ö Max	D Ꮋ Unit
Collector−Base Breakdown Voltage	V_{CBO}	I_C =10ƤA I_E=0	75			V
Collector−Emitter Breakdown Voltage	V_{CEO}	I_C =10mA I_B = 0	40			V
Emitter−Base Breakdown Voltage	V_{EBO}					

/ Electrical Characteristics(Ta=25)

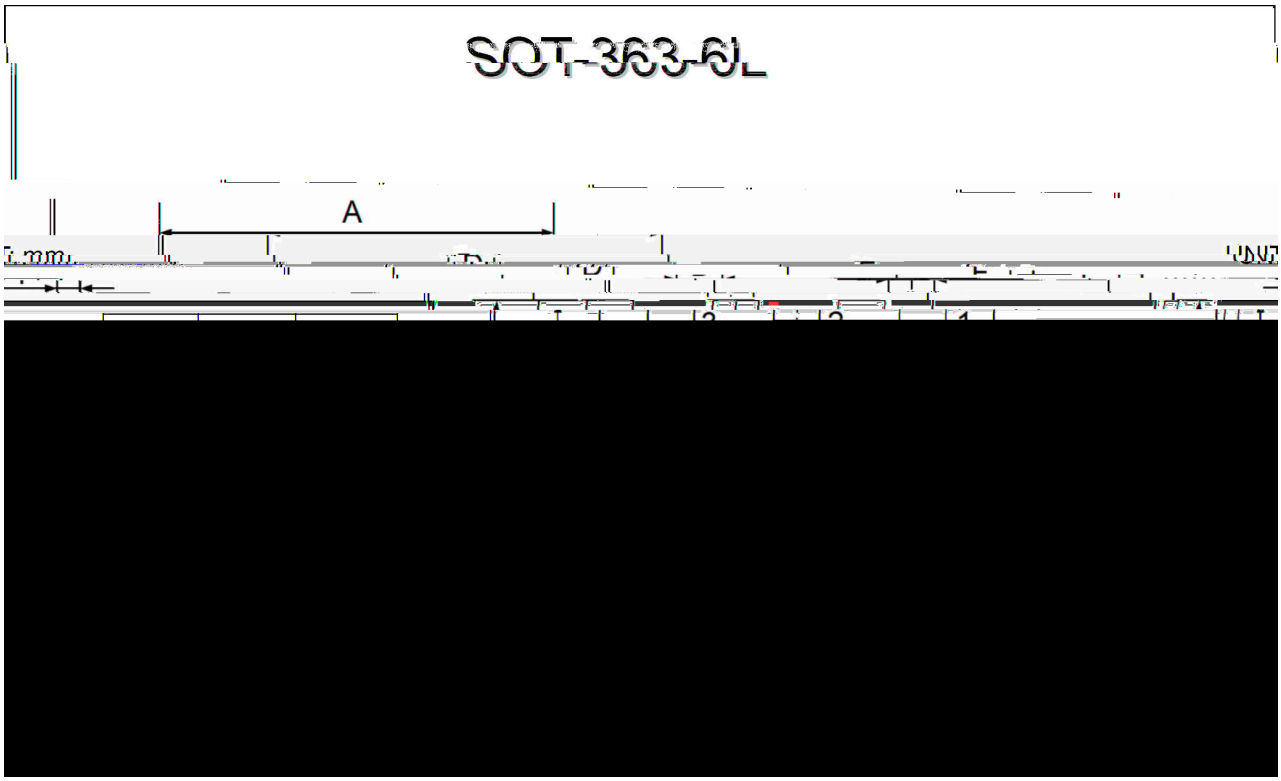
v ‘Ω Parameter	ϒ N Symbol	⊥ :ϒ ϒ Test Conditions	ω ŋ Ө Min	Ɛ ʒ Ө Typ	ω ᶻ Ө Max	ɒ ɥ Unit
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$ (1)	I_C=150mA I_B=15mA			0.3	V
	$V_{CE(sat)}$ (2)	I_C=500mA I_B=50mA			1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$ (1)	I_C=150mA I_B=15mA	0.6		1.2	V
	$V_{BE(sat)}$ (2)	I_C=500mA I_B=50mA			2.0	V
Transition Frequency(Note 3)	f_T	V_{CE}=20V I_C=20mA f=100MHz	300			MHz
Output Capacitance	C_{ob}	V_{CB}=10V I_E=0 f=1.0MHz			8.0	pF
Input Capacitance	C_{ib}	V_{EB}=0.5V I_C=0 f=1.0MHz			25	
Input Impedance	h_{ie}	I_C=1.0mA V_{CE}=10V f =1.0kHz	2.0		8.0	kƑ
		I_C=10mA V_{CE}=10V f=1.0kHz	0.25		1.25	
Voltage Feedback Ratio	h_{re}	I_C=1.0mA V_{CE}=10V f=1.0kHz			8.0	X^{10-4}
		I_C=10mA V_{CE}=10V f=1.0kHz			4.0	
Small−Signal Current Gain	h_{fe}	I_C=1.0mA V_{CE}=10V f=1.0kHz	50		300	-
		I_C=10mA V_{CE}=10V f=1.0kHz	75		375	-
Output Admittance	h_{oe}	I_C=1.0Ma V_{CE}=10V f=1.0kHz	5.0		35	Ƥmhos
		I_C=10mA V_{CE}=10V f=1.0kHz	25		200	
Collector Base Time Constant	r_b, C_c	I_E=20mA V_{CB}=20V f =31.8MHz			150	Ps
Noise Figure	NF	I_C=100ƤA V_{CE}=10V R_S=1.0kƑ f=1.0 kHz			4.0	dB
Turn-on Time	t_d	V_{CC}=30V I_C=150mA $V_{BE(OFF)}$=-0.5V I_{B1}=15mA			10	ns
Storage Time	t_r				25	ns
	t_s	V_{CC}=30V I_C=150mA I_{B1}=I_{B2}=15mA			225	ns
Fall Time	t_f				60	ns

Note2 . Pulse Test: Pulse Width ≤ 300Ƥs, Duty Cycle ≤ 2.0%.
Note3:f_T is defined as the frequency at which $|h_{fe}|$ extrapolates to unity.

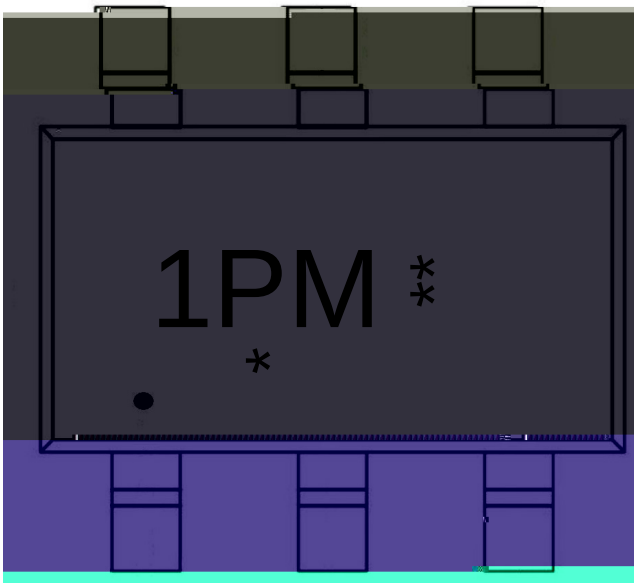
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



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Note:

● χ	ɒ 4 ɓ Slq
4S P χ	Product Type Code
---=	Lot No. Code, code change with Lot No.