

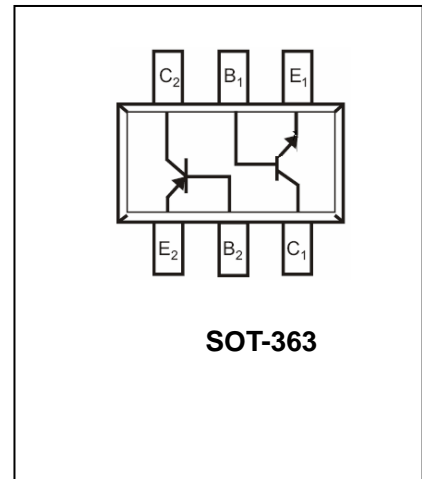


Dual 40V complementary transistors

ZXTC2045E6

FEATURES

- 40V complementary device
- Up to 5 amps peak current
- High hFE



APPLICATIONS

- MOSFET and IGBT gate driving

ORDERING INFORMATION

Type No.	Marking	Package Code
ZXTC2045E6	2045	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value		Units
		NPN	PNP	
V _{CB0}	Collector-Base Voltage	40	-40	V
V _{CEO}	Collector-Emitter Voltage	30	-30	V
V _{EBO}	Emitter-Base Voltage	7	-7	V
I _C	Collector Current -Continuous	1.5	-1.5	A
P _D	Power dissipation at TA =25°C ^{(a) (c)}	0.9		W
	Linear derating factor	7.2		mW/°C
P _D	Power dissipation at TA =25°C ^{(a) (d)}	1.1		W
	Linear derating factor	8.8		mW/°C
P _D	Power dissipation at TA =25°C ^{(b) (c)}	1.7		W
	Linear derating factor	13.6		mW/°C
T _j , T _{stg}	Junction and Storage Temperature	-55 to +150		°C
R _{θJA}	Junction to ambient ^{(a) (c)}	139		°C/W
R _{θJA}	Junction to ambient ^{(b) (c)}	73		°C/W



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R θ JC	Junction to ambient ^{(a) (d)}	113	°C/W
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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =(-)100μA, I _E =0	(-)40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =(-)10mA, I _B =0	(-)30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =(-)100μA, I _C =0	(-)7			V
Collector cut-off current	I _{CBO}	V _{CB} =(-)32V, I _E =0			(-)20	nA
Emitter cut-off current	I _{EBO}	V _{EB} =(-)6V, I _C =0			(-)20	nA
DC current gain	h _{FE}	V _{CE} =(-)2V, I _C =(-)100mA	180	300	500	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =(-)0.75A, I _B =(-)15mA			(-)0.375	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =(-)0.75A, I _B =(-)15mA			(-)1.2	V

NOTES:

- (a) For a device surface mounted on 25mm x 25mm x 0.6mm FR4 PCB with high coverage of single sided 1oz copper, in still air conditions.
- (b) As above measured at t < 5 seconds.
- (c) For device with one active die.
- (d) For device with two active dice running at equal power.



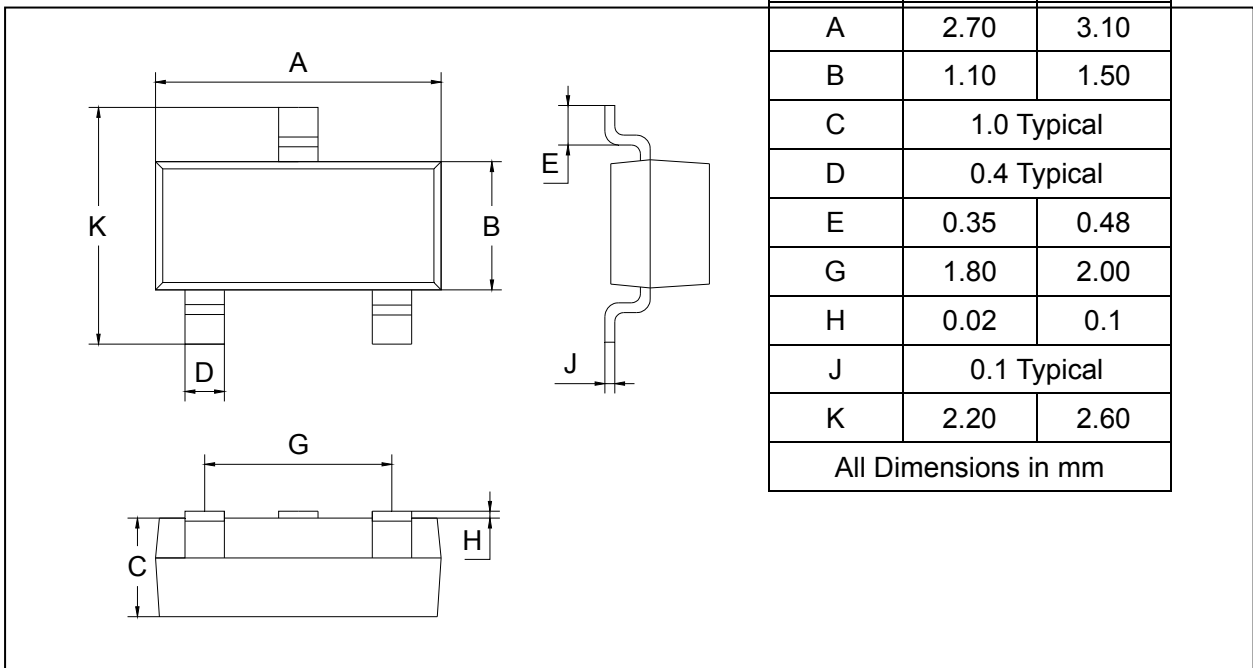
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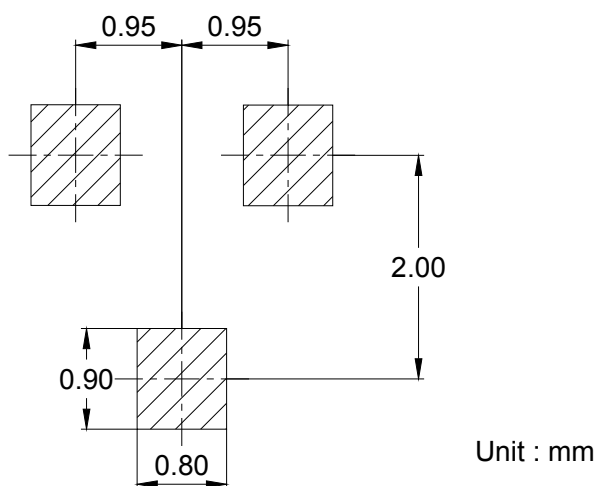
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
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ZXTC2045E6

ZXTC2045E6	SOT-363	3000/Tape&Reel
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