Peak gate power	P_{GM}	20	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	0.7	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33	-	-	45	mA
V_{GT}		-	-	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3k	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	120	mA
I_H	I_T=500mA	-	-	100	mA
dV/dt	V_D=800V Gate Open T_j=125	1500	-	-	V s
t_{on}	I_G=50mA I_A=500mA I_R=50mA T_j=25	-	5	-	s
t_{off}		-	100	-	s

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=80A t_p=380 s	T_j=25	1.7	V
V_{TO}	Threshold voltage	T_j=125	0.69	V
R_D	Dynamic resistance	T_j=125	21	
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	10	A
I_{RRM}		T_j=125	5	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (DC)	0.3	/W
$R_{th(j-a)}$	junction to ambient (DC, in free air, S=1cm^2)	30	/W

ORDERING INFORMATION

J	CT	12	40	E	-/
JieJie Microelectronics Co., Ltd.	SCRs	12:V_{DRM} /V_{RRM} 1200V	$I_{T(RMS)}$:40A	E:TO-263	Blank:Tube -TR:Tape & Reel

MARKING

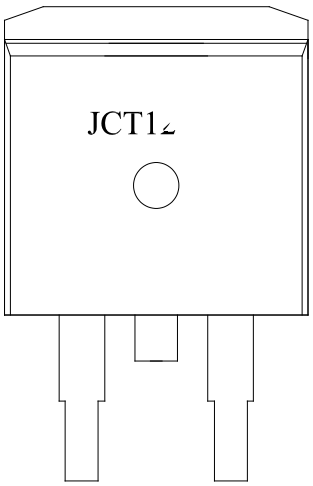


FIG.1: Maximum power dissipation versus RMS on-state current

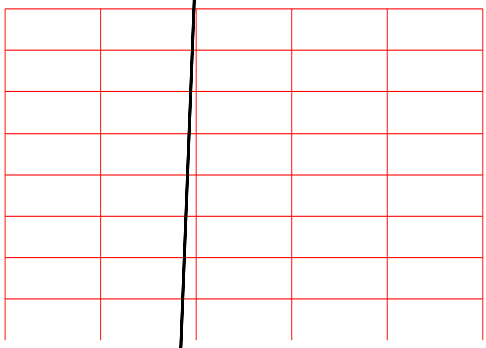


FIG.2: RMS on-state current versus case temperature0102030405060708001020304050P(W)IT(RMS)

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

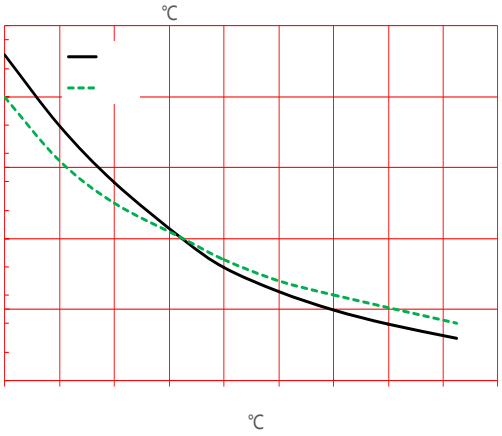
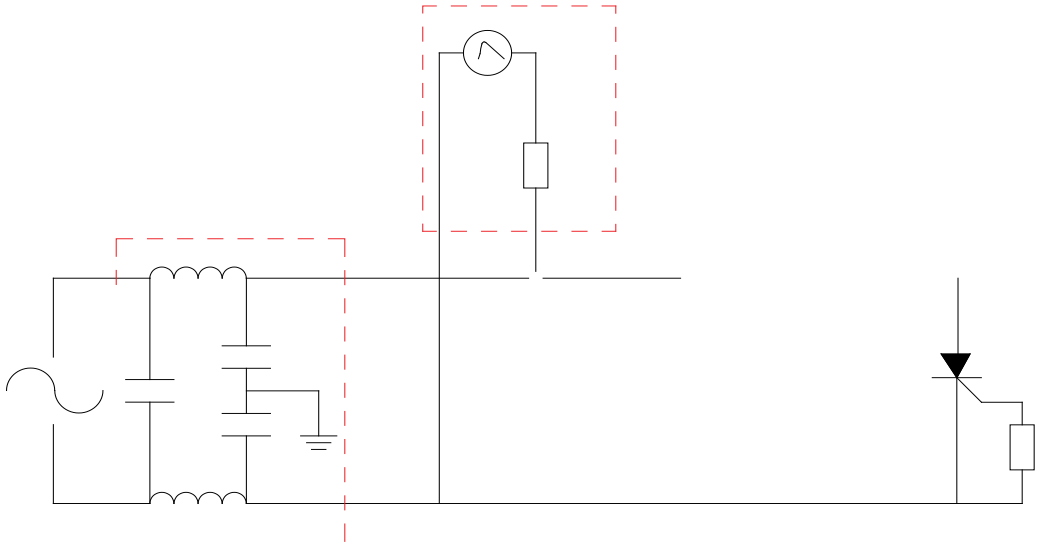


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards. G



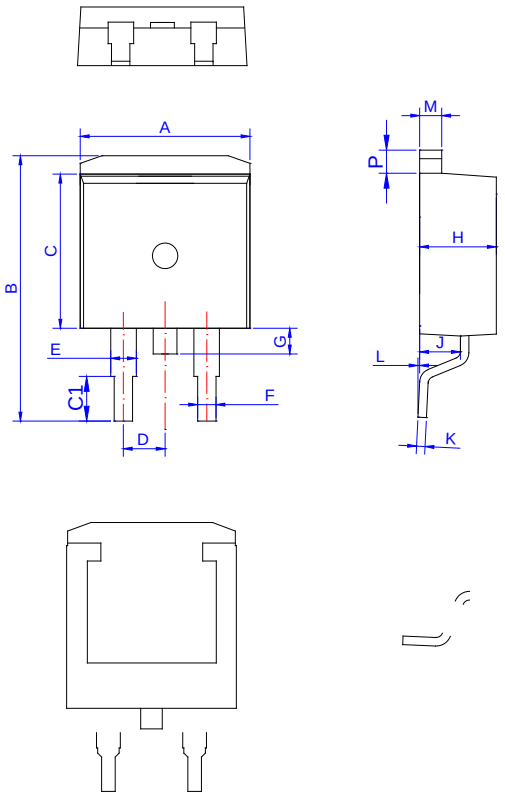
ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT1240E	1200	45	TO-263	50	Tube
JCT1240E-TR				800	Tape & Reel

Document Revision History

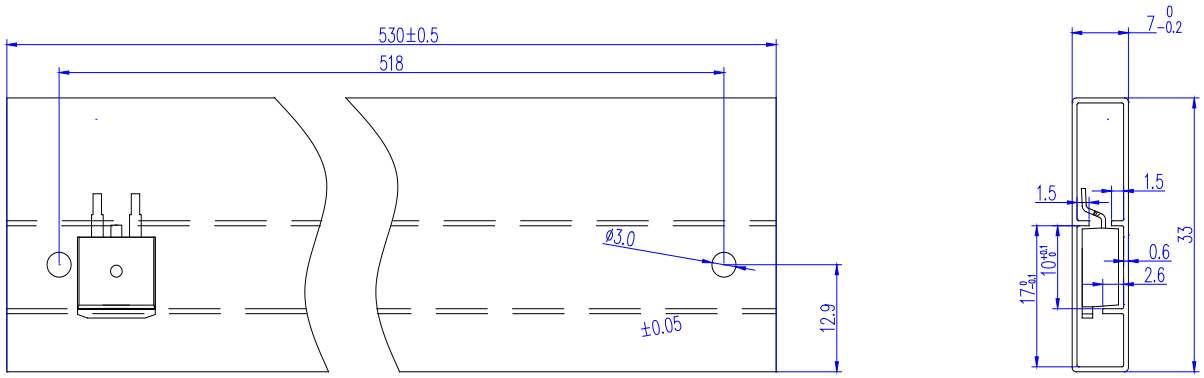
Date	Revision	Changes
Dec.3, 2025	A.1.0	Last update

PACKAGE MECHANICAL DATA

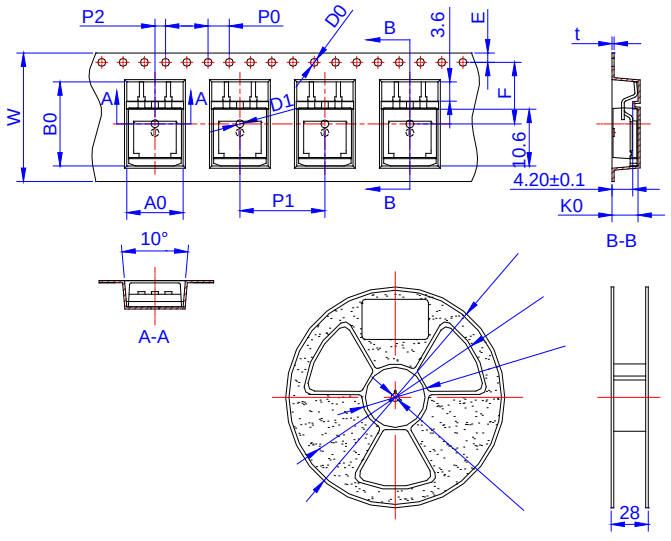


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.40		9.60	0.370		0.378
D	2.40		2.70	0.094		0.106
E	1.20		1.50	0.047		0.059
F	0.75		0.85	0.029		0.033

DELIVERY MODE



PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-263	TUBE	50	1,000	5,000



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
W	23.70	24.00	24.30	0.933	0.945	0.957
E	1.65	1.75	1.85	0.065	0.069	0.073
F	11.40	11.50	11.60	0.449	0.453	0.457
D0	-	1.50	1.60	-	0.059	0.063
D1	-	1.50	1.60	-	0.059	0.063
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	15.90	16.00	16.10	0.626	0.630	0.634
P2	1.90	2.00	2.10	0.075	0.079	0.083
A0	10.80	10.90	11.00	0.425	0.429	0.433
B0	16.20	16.30	16.40	0.638	0.642	0.646
K0	4.80	4.90	5.00	0.189	0.193	0.197
t	0.35	0.40	0.45	0.014	0.016	0.018

PACKAGE	OUTLINE	REEL (PCS)	PER CARTON (PCS)	TAPE & REEL
TO-263	TAPING	800	4,000	13 inch

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