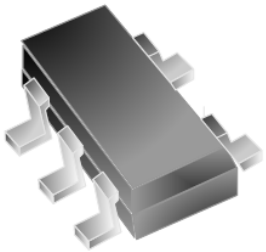
JEU05MF TVS Diode Array Rev.3.0

FEATURES

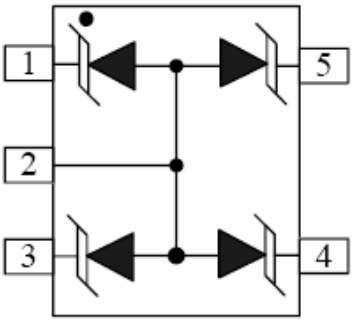
- ✧ 100 Watts peak pulse power per line (t_P=8/20μs)
- ✧ Low leakage current
- ✧ Low operating voltage
- ✧ Working voltage:5V
- ✧ RoHS compliant



SOT-353

MAIN APPLICATIONS

- ✧ Cellular handsets & accessories
- ✧ Personal digital assistants(PDAs)
- ✧ Notebook & handhelds
- ✧ Portable instrumentation
- ✧ Digital cameras
- ✧ MP3 player



Top-view

PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) ±25kV (air), ±25kV (contact)
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns)
- ✧ IEC61000-4-5 (Lightning) 8A (8/20μs)

MECHANICAL CHARACTERISTICS

- ✧ JEDEC SOT-353 package
- ✧ Molding compound flammability rating : UL 94V-0
- ✧ Quantity per reel : 3, 000pcs
- ✧ Lead finish :lead free
- ✧ Marking code：05F

ABSOLUTE MAXIMUM RATINGS (T_A=25ºC, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation on 8/20μs waveform	P_{PP}	100	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	+/- 25 +/- 25	kV
Lead soldering temperature	T_L	260 (10 sec.)	℃
Operating junction temperature range	T_J	-55 to +125	℃
Storage temperature range	T_{STG}	-55 to +150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse working voltage	V_{RWM}				5.0	V
Reverse breakdown voltage	V_{BR}	I_T=1mA	6.0			V
Reverse leakage current	I_R	V_R=5V			1	μA
Clamping voltage （I/O pin to Ground）	V_C	I_{PP}=1A, t_P=8/20μs			9.6	V
		I_{PP}=8A, t_P=8/20μs		11	15	V
Junction capacitance	C_J	V_R=0V, f=1MHz Any I/O pin to ground		70	85	pF

RATINGS AND V-I CHARACTERISTICS CURVES (T_A=25ºC, unless otherwise noted)

FIG.1:V- I curve characteristics (Uni-directional)

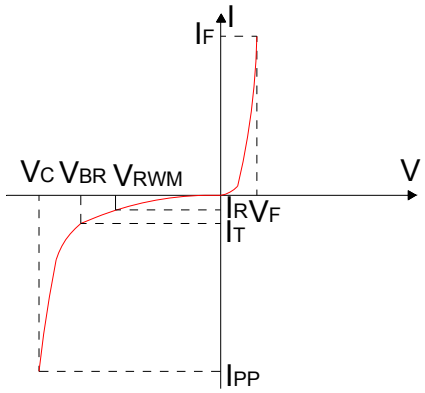


FIG.2: Pulse waveform (8/20μs)

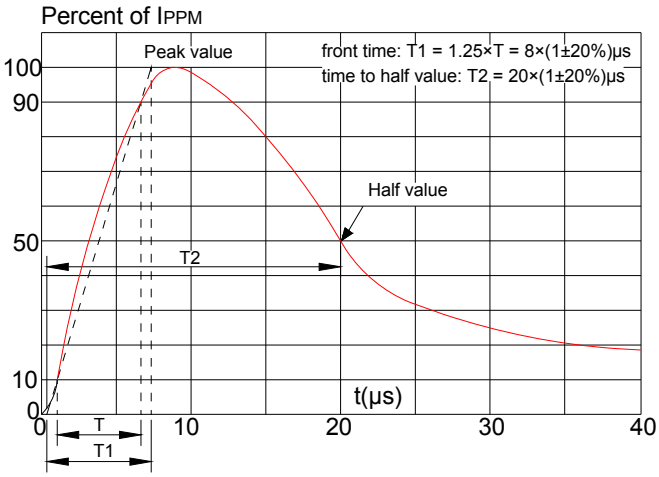


FIG.3: Pulse derating curve

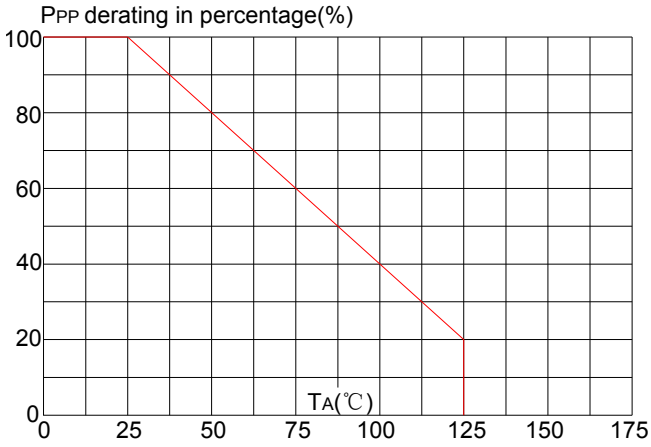
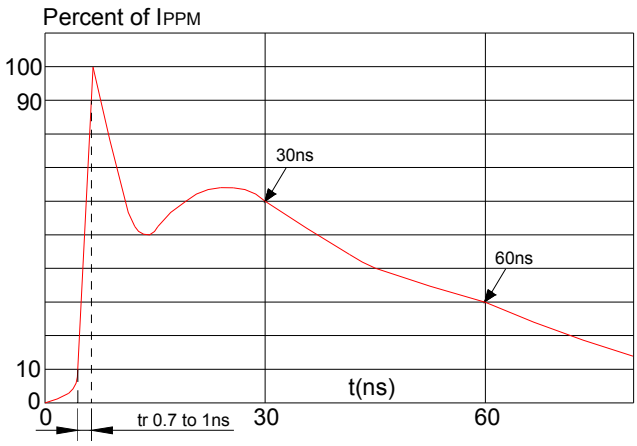
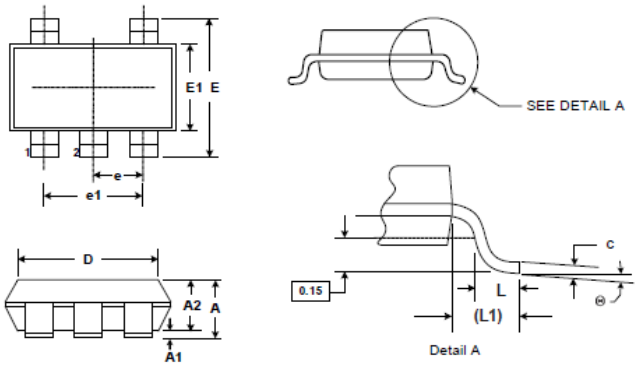
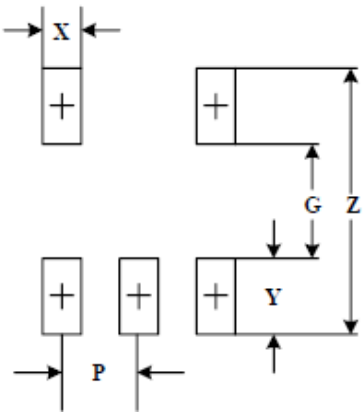


FIG.4: ESD clamping (25kV contact)



PACKAGE MECHANICAL DATA

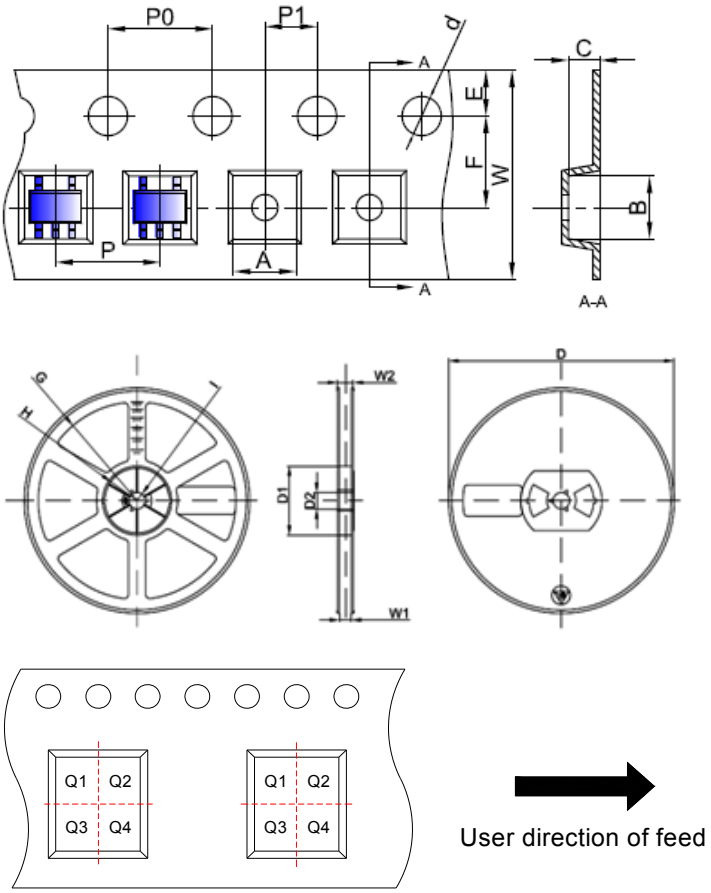




Symbol	Dimensions			
	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
A2	0.035	0.039	0.900	1.000
D	0.079	0.087	2.000	2.200
E1	0.045	0.053	1.150	1.350
E	0.085	0.096	2.150	2.450
e	0.020TYP		0650TYP	
e1	0.047	0.055	1.200	1.400
L	0.022 REF		0.252 REF	
L1	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

Dim	Dimensions	
	Inches	Millimeters
Z	0.090	2.30
G	0.073	1.85
P	0.020 TYP	0.65TYP
X	0.008	0.20
Y	0.033	0.085

TAPE AND REEL SPECIFICATION-SOT-353



Pin 1 quadrant: Q3

Symbol	Millimeters	Inches
A	2.25±0.1	0.089±0.004
B	2.55±0.1	0.100±0.004
C	1.20±0.1	0.047±0.004
d	$\Phi 1.50^{+0.1}_{-0.0}$	$\Phi 0.059^{+0.004}_{-0.000}$
E	1.75±0.1	0.069±0.004
F	3.50±0.05	0.138±0.002
P0	4.00±0.1	0.157±0.004
P	4.00±0.1	0.157±0.004
P1	2.00±0.05	0.079±0.002
W	$8.00^{+0.3}_{-0.1}$	$0.315^{+0.012}_{-0.004}$
D	Φ178±1	7.008±0.039
D1	54.40±0.4	2.142±0.016
D2	13.00±0.2	0.512±0.008
G	R78.0±0.25	3.071±0.010
H	R25.6±0.25	1.008±0.010
I	R6.50±0.2	0.256±0.008
W1	9.50±1	0.374±0.039
W2	12.30±1	0.484±0.039

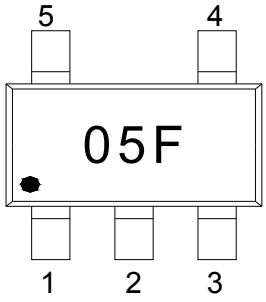
Packaging description:

SOT-353 parts are shipped in tape. The carrier tape is made from a dissipative(carbon filled) polycarbonate resin. The cover tape is a multilayer film(heat activated adhesive in nature)primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and made of polystyrene plastic(anti-static coated).

ORDERING INFORMATION

PART No.	PACKAGE TYPE	QUANTITY(PCS) REEL	DESCIPTION
JEU05MF	SOT-353	3,000	7 inch reel pack

MARKING CODE

Part Number	Marking Code
JEU05MF	

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