

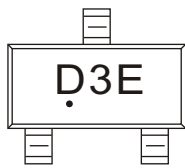
SOT-23 Plastic-Encapsulate Diodes

RB411D SCHOTTKY BARRIER DIODE

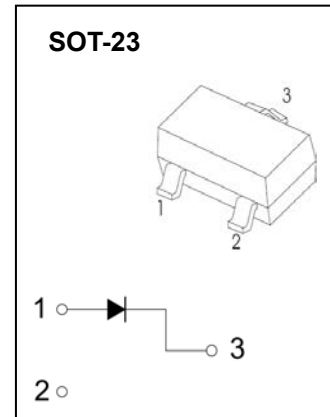
FEATURES

- Small Surface Mounting Type
- Low Reverse Current and Low Forward Voltage
- High Reliability

Marking: D3E



D3E = Device code
Solid dot = Green molding compound device.



Maximum Ratings(Ta=25°C unless otherwise noted)

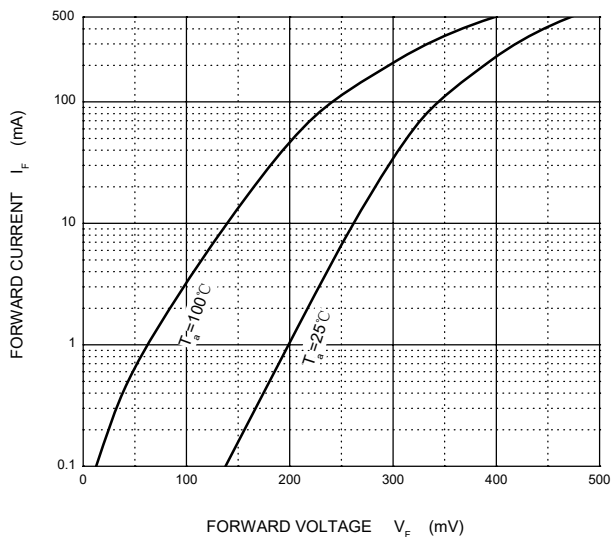
Parameter	Symbol	Limit	Unit
Peak repetitive reverse voltage	V_{RM}	40	V
RMS reverse voltage	$V_{R(RMS)}$	28	V
DC reverse voltage	V_R	20	V
Mean rectifying output current	I_O	500	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	3	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_j	-40 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Electrical Ratings @Ta=25°C

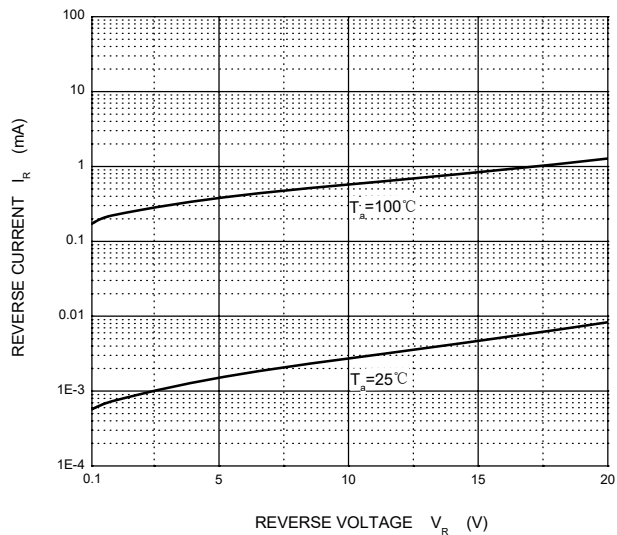
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse breakdown voltage	V_R	20			V	$I_R=100\mu A$
Forward voltage	V_{F1}			0.3	V	$I_F=10mA$
	V_{F2}			0.5	V	$I_F=500mA$
Reverse current	I_R			30	μA	$V_R=10V$
Capacitance between terminals	C_T		20		pF	$V_R=10V, f=1MHz$

Typical Characteristics

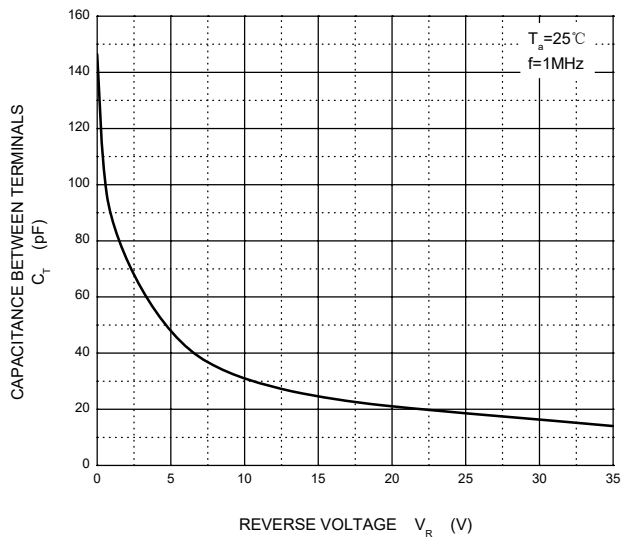
Forward Characteristics



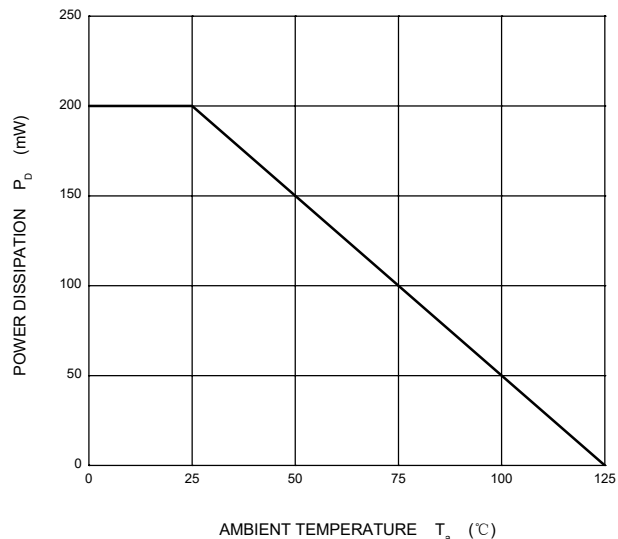
Reverse Characteristics



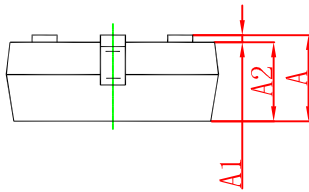
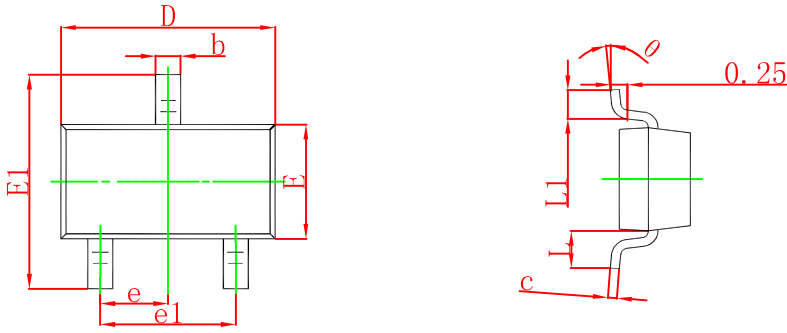
Capacitance Characteristics



Power Derating Curve

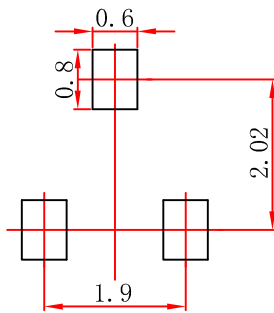


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

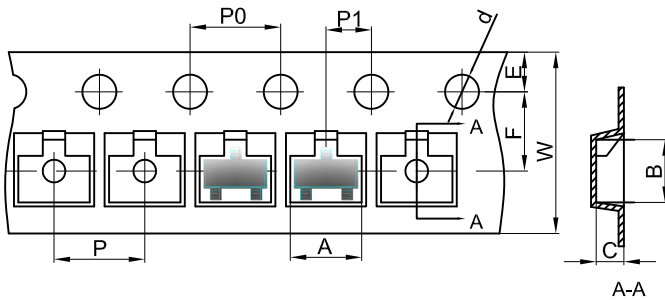
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape



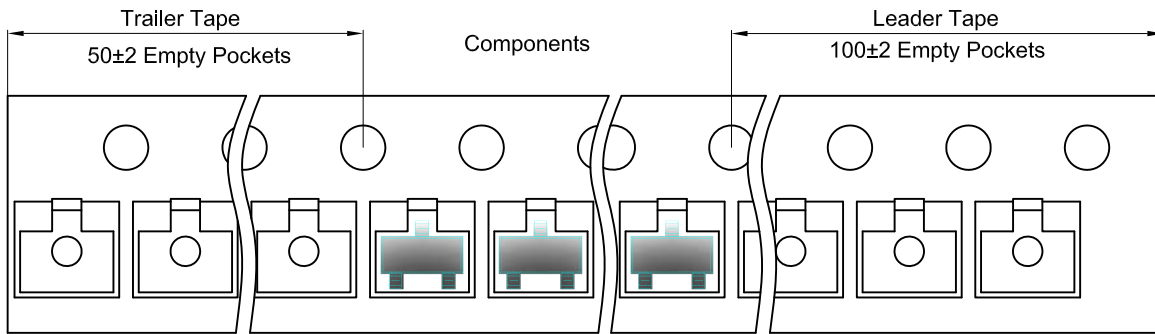
Packaging Description:

SOT-23 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 is made of polystyrene plastic (anti-static coated).

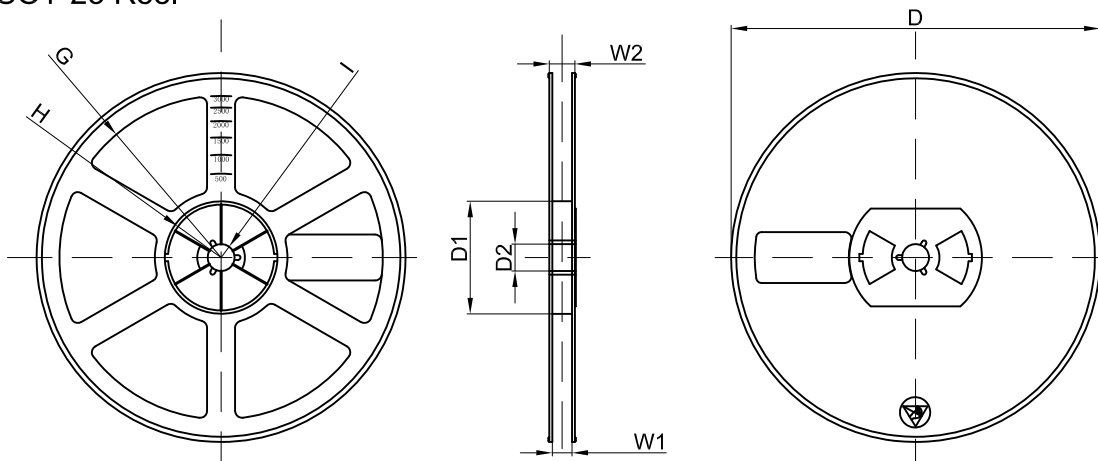
Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 Reel



Dimensions are in millimeter

Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	