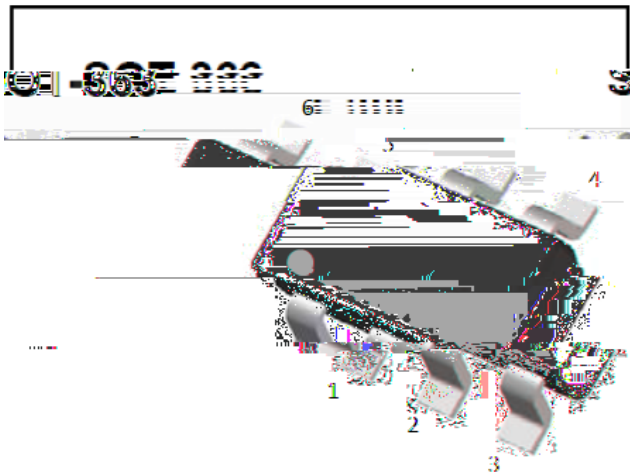


Zener Diodes/Switching Diode



- 1、 Anode
- 2、 Anode
- 3、 Cathode
- 4、 Cathode
- 5、 Anode
- 6、 Cathode

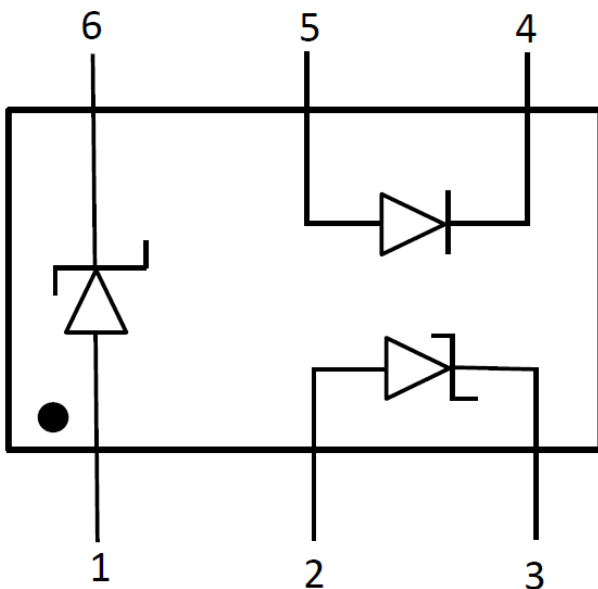
Features

- Epoxy meets UL-94 V-0 flammability rating
- Surface mount package ideally Suited for Automatic Insertion
- Moisture Sensitivity Level 1

Mechanical Data

- **Package:** SOT-363
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** 13C48

■Equivalent circuit





PTL13C48

■ Pin1 6&Pin2 3 Maximum Ratings (Ta=25 Unless otherwise specified)

PARAMETER		UNIT	VALUE
Power Dissipation	P_D	mW	200
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	/W	625
Storage Temperature Range	T_{stg}	°C	-55~+150
Junction Temperature	T_J	°C	-55~+150

■ Pin1 6&Pin2 3 Electrical Characteristics (Ta=25 unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	TYP	Max
Zener Voltage	VZ	V	$I_R=5mA$	12.4	13	14.1
Forward Voltage	V_F	V	$I_F=10mA$	-	-	0.9
Reverse Leakage Current	I_{R1}	uA	$V_R=8V$	-	-	0.1
Zener Impedance	Z_{ZT}	Ω	$I_{ZT}=5mA$	-	-	30
	Z_{Zk}	Ω	$I_{ZK}=1mA$	-	-	170

■ Pin4 5 Maximum Ratings (Ta=25 Unless otherwise specified)



PTL13C48

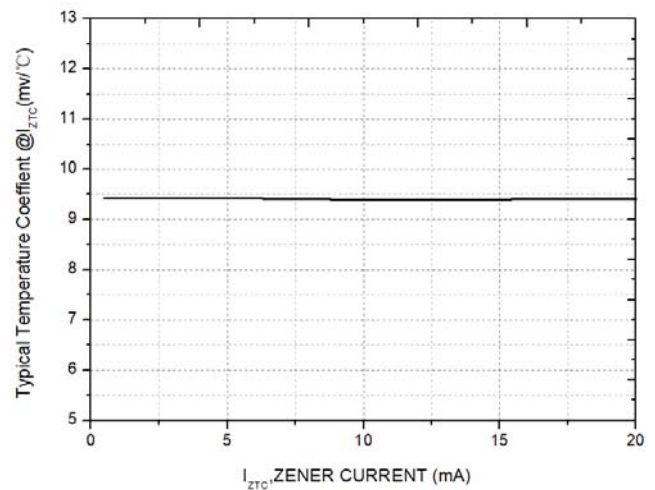
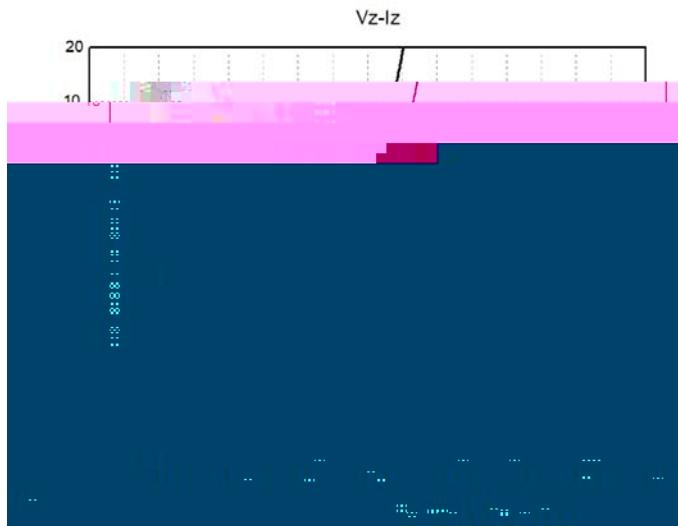
■ Pin4 5 Electrical Characteristics (Ta=25 unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V_R	V	$I_R=100\mu A$	100	-
Forward Voltage	V_F	V	$I_F=1mA$	-	0.715
			$I_F=10mA$	-	0.855
			$I_F=50mA$	-	1
			$I_F=150mA$	-	1.25
Reverse Leakage Current	I_{R1}	nA	$V_R=20V$	-	25
	I_{R2}	μA	$V_R=75V$	-	1
Capacitance	C	pF	$V_R=0V, f=1MHz$	-	4
Reverse Recovery Time	T_{RR}	ns	$I_F=10mA$ $I_{RR}=1mA$	-	4

■ Ordering Information (Example)

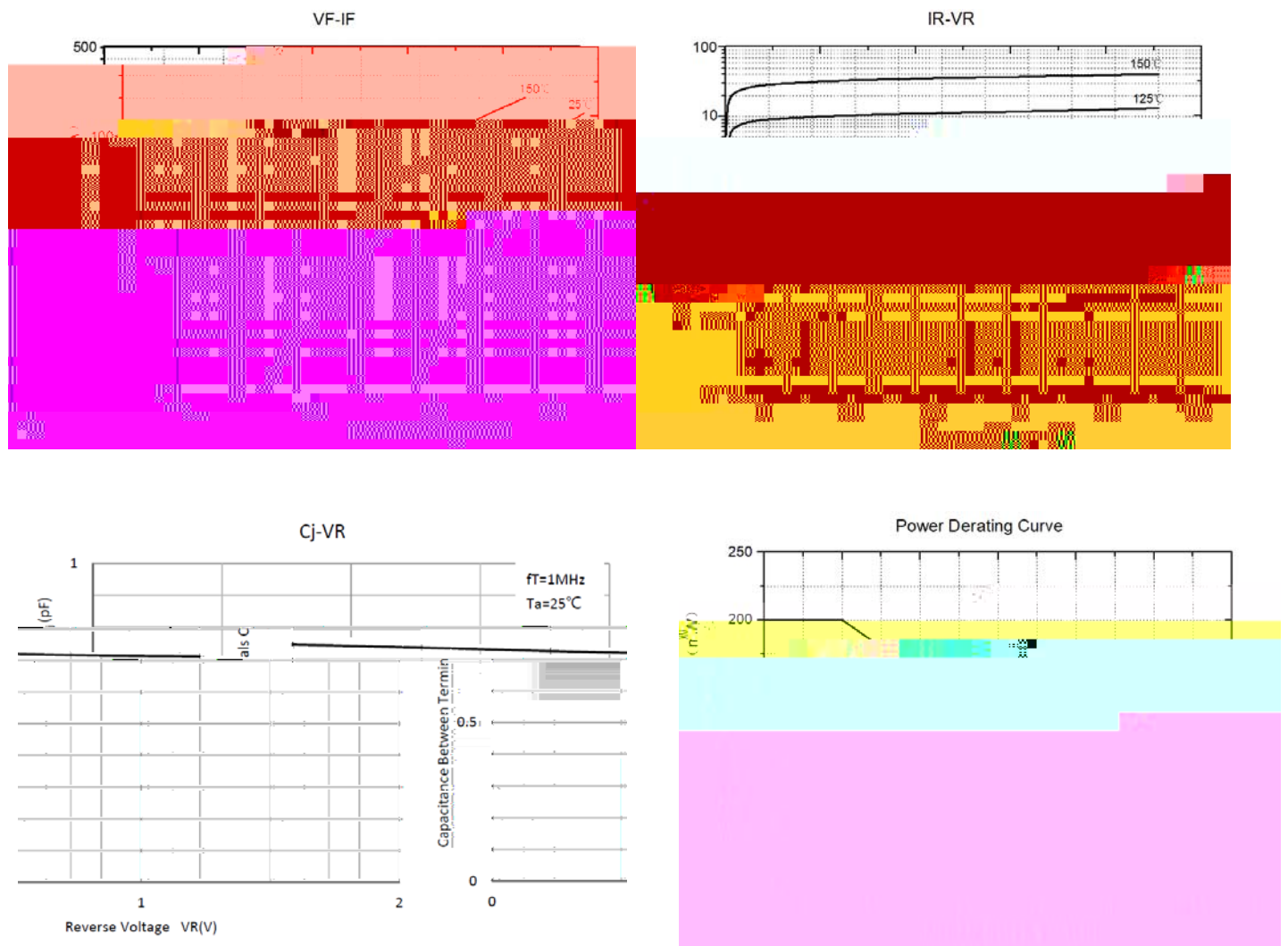
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
PTL13C48	F2	Approximate 0.009g	3000	30000	120000	7" reel

■ Pin1 6&Pin2 3 Electrical Characteristics (Typical)

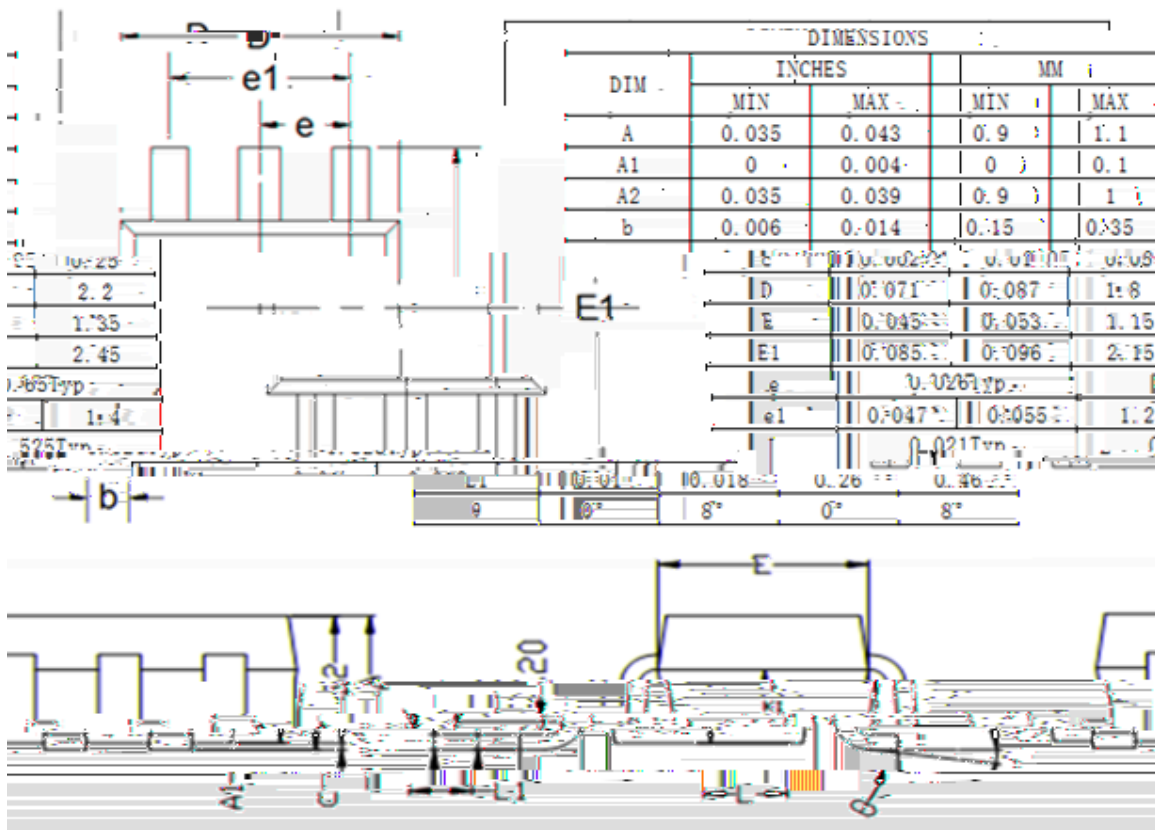




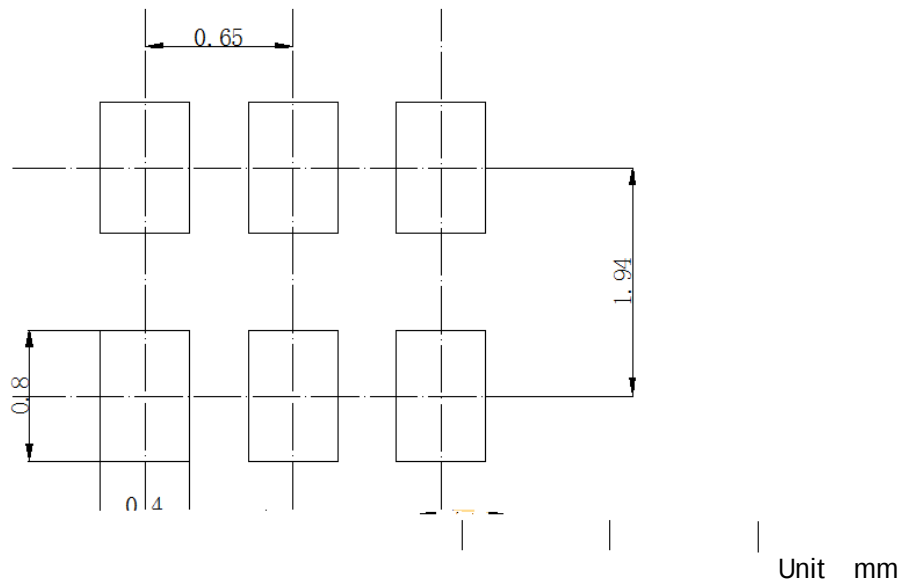
■ Pin4 5 Electrical Characteristics (Typical)



■SOT-363 Package Outline Dimensions



■SOT-363 Soldering Footprint





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