



## FEATURES:

- 400 Watts peak pulse power per line ( $t_P=8/20\mu s$ )
- Protects one bi-directional I/O line
- Low clamping voltage
- Working voltage:36V
- Low leakage current
- RoHS compliant

## MAIN APPLICATIONS

- Cell phone handsets and accessories
- Microprocessor based equipment

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^{\circ}C$ , RH=45%-75%, unless otherwise noted)

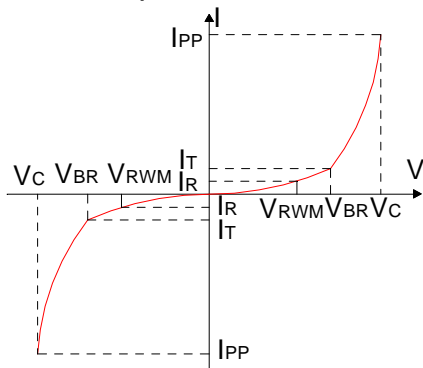
Parameter	Symbol	Value	Unit
Peak pulse power dissipation on 8/20 $\mu$ s waveform	$P_{PP}$	400	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$V_{ESD}$	+/- 30 +/- 30	kV
Lead soldering temperature	$T_L$	260 (10 sec.)	
Operating junction temperature range	$T_J$	-55 to +125	
Storage temperature range	$T_{STG}$	-55 to +150	

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^{\circ}C$ )

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse working voltage	$V_{RWM}$				36	V
Reverse breakdown voltage	$V_{BR}$	$I_T=1mA$	40	42	47.5	V
Reverse leakage current	$I_R$	$V_{RWM}=36V$			0.2	A
Clamping voltage	$V_C$	$I_{PP}=1A, t_p=8/20 \mu s$		45	60	V
		$I_{PP}=6A, t_p=8/20 \mu s$		60	70	V
Junction capacitance	$C_J$	$V_{RWM}=0V, f=1MHz$		14	25	pF

**RATINGS AND V I CHARACTERISTICS CURVES** ( $T_A=25^{\circ}C$ , unless otherwise noted)

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



**FIG.2: Pulse waveform (8/20  $\mu$ s)**

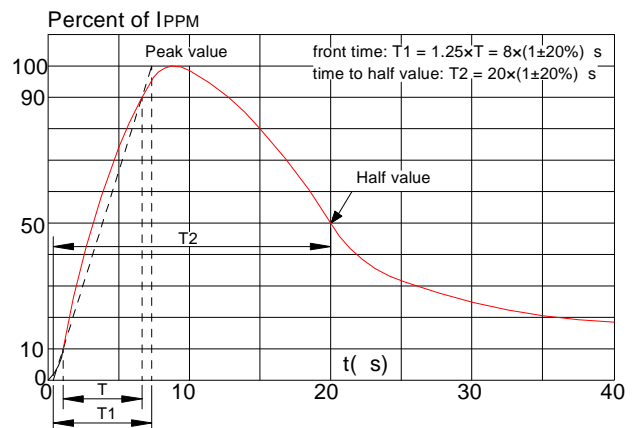


FIG.3: Pulse derating curve

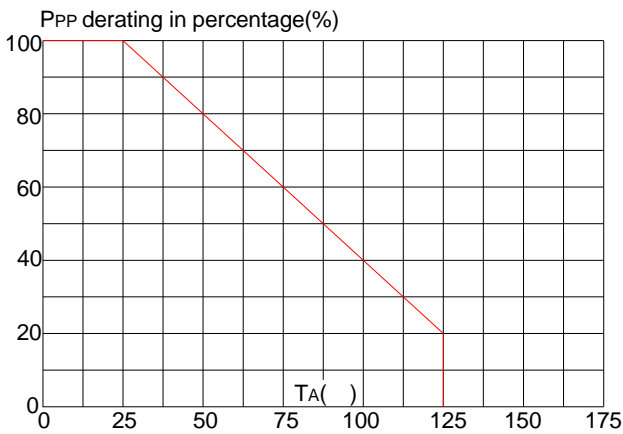
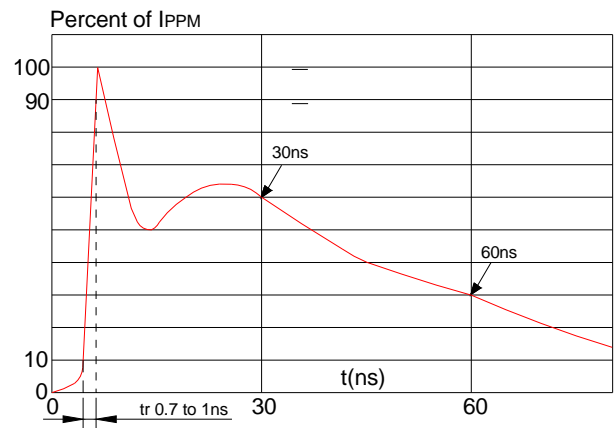
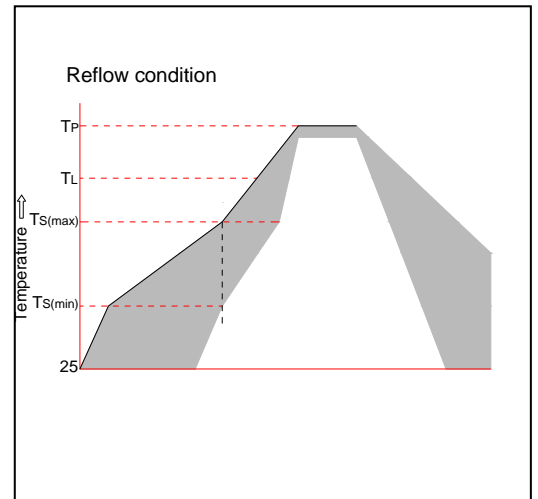


FIG.4: ESD clamping (30kV contact)

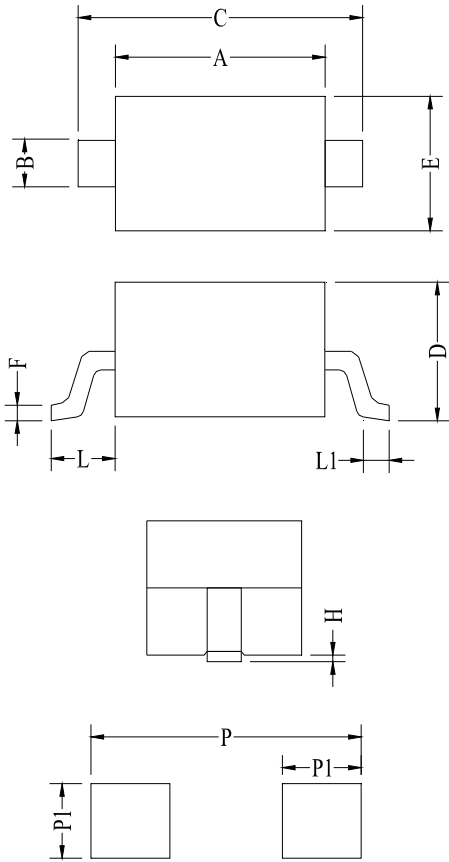


SOLDERING PARAMETERS

Reflow Condition		Pb-Free assembly (see figure at right)
Pre Heat	-Temperature Min ( $T_{s(min)}$ )	+150
	-Temperature Max( $T_{s(max)}$ )	+200
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquidus Temp ( $T_L$ ) to peak)		3 /sec. Max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3 /sec. Max
Reflow	-Temperature( $T_L$ )(Liquidus)	+217
	-Temperature( $t_L$ )	60-150 secs.
Peak Temp ( $T_p$ )		+260(+0/-5)
Time within 5 of actual Peak Temp ( $t_p$ )		20-40secs.
Ramp-down Rate		6 /sec. Max
Time 25 to Peak Temp ( $T_p$ )		8 min. Max
Do not exceed		+260



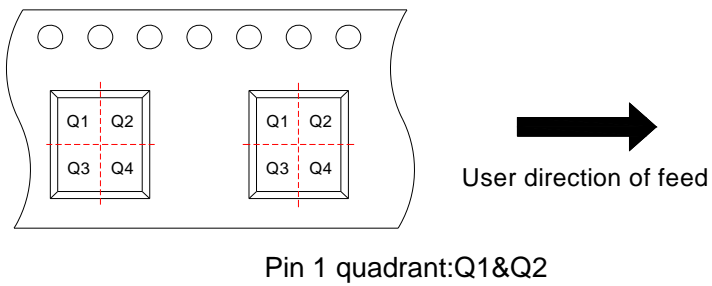
PACKAGE MECHANICAL DATA



Land Pattern

Symbol	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	1.60	1.70	1.80	0.063	0.067	0.071
B	0.25	0.32	0.40	0.010	0.013	0.016
C	2.30	2.60	2.80	0.091	0.102	0.110
D	0.80	0.95	1.10	0.031	0.037	0.043
E	1.20	1.30	1.40	0.047	0.051	0.055
F	0.08	0.13	0.18	0.003	0.005	0.007
L	0.475REF			0.019REF		
L1	0.25	0.33	0.40	0.010	0.013	0.016
H	0.00	0.06	0.14	0.000	0.002	0.006
P	3.00			0.118		
P1	0.80			0.031		

TAPE AND REEL INFORMATION SOD 323



ORDERING INFORMATION

PART No.	PACKAGE TYPE	QUANTITY(PCS) REEL	DESCRIPTION
----------	--------------	-----------------------	-------------

MARKING CODE

---

Part Number

Marking Code