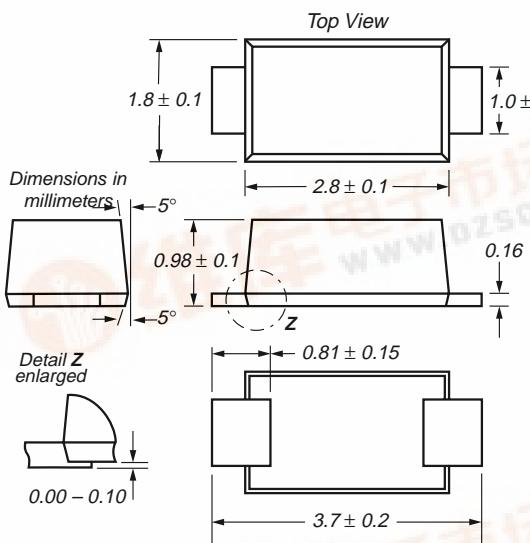




# ES07B thru ES07D



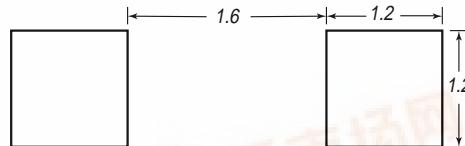
DO-219 (SMF)



## Small Surface Mount Ultrafast Rectifiers

Forward Current 0.7A  
Reverse Voltage 100 to 200V

### Mounting Pad Layout



## Mechanical Data

**Case:** SMF Plastic Case

**Polarity:** Color band denotes cathode end

**Weight:** approx. 0.01g

**Packaging codes/options:** TBD

## Features

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- High temperature soldering:  
250°C/10 seconds at terminals

## Maximum Ratings and Thermal Characteristics ( $T_C = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	ES07B	ES07D	Unit
Device marking code		EB	ED	
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	200	V
Maximum RMS voltage	$V_{RMS}$	70	140	V
Maximum DC blocking voltage	$V_{DC}$	100	200	V
Maximum average forward rectified current	$I_{F(AV)}$	0.7		A
Peak forward surge current 8.3ms single half sine-wave $T_L = 25^\circ\text{C}$	$I_{FSM}$	30		A
Typical thermal resistance (on ceramic substrate) (on epoxy substrate)	$R_{\theta JA}$	55 120		$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +125		$^\circ\text{C}$

## Electrical Characteristics ( $T_C = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.98	V
Maximum DC reverse current at Rated DC blocking voltage	$I_R$	10 50	$\mu\text{A}$ mA
Typical reverse recovery time at $I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{rr}=0.25\text{A}$	$t_{rr}$	25	ns
Typical capacitance at 4V, 1 MHz	$C_J$	TBD	pf