

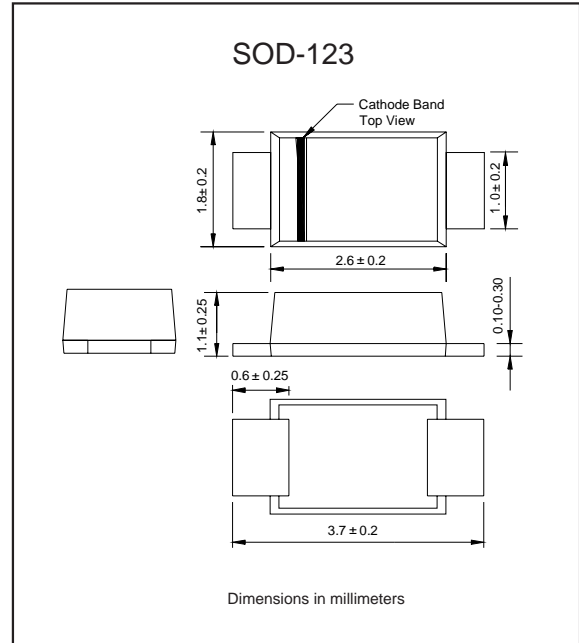
### Features

- ▶ Glass passivated device
- ▶ Ideal for surface mounted applications
- ▶ Low reverse leakage
- ▶ Metallurgically bonded construction
- ▶ High temperature soldering guaranteed:
- ▶ Compliant to RoHS Directive 2011/65/EU
- ▶ Compliant to Halogen-free
- ▶ Suffix "-Q1" for AEC-Q101

### Mechanical data

- ▶ **Case:** JEDEC SOD-123 molded plastic body over passivated chip
- ▶ **Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any

### Package outline



### Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

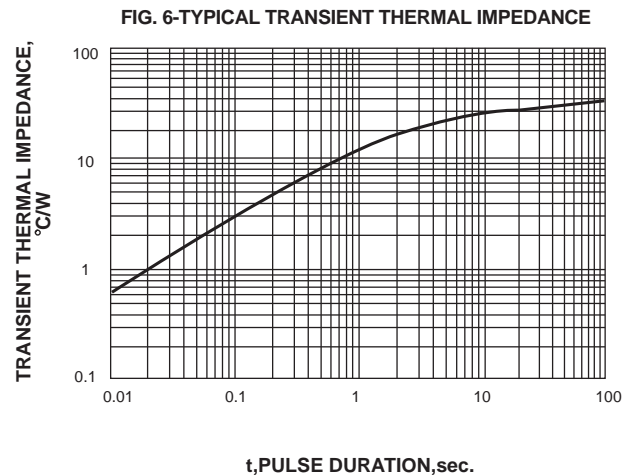
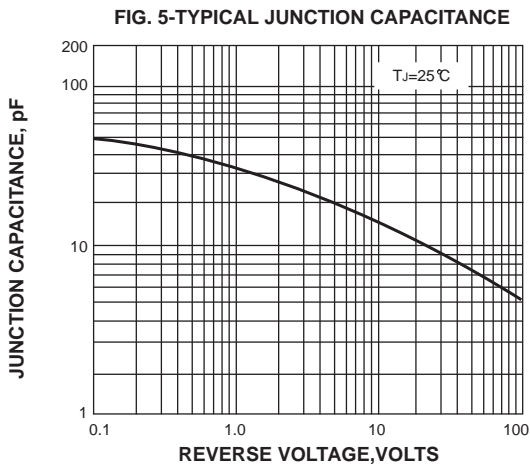
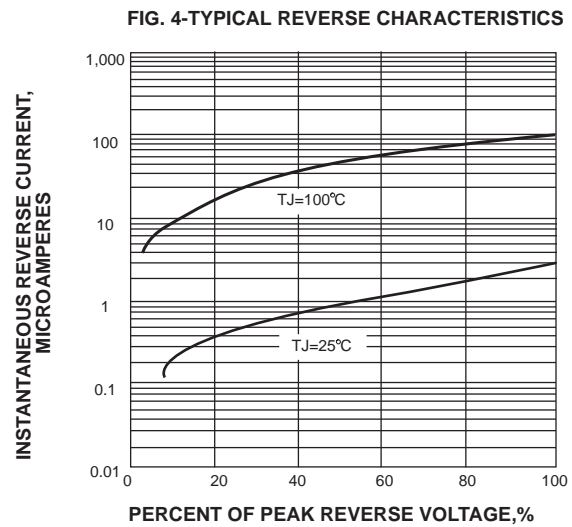
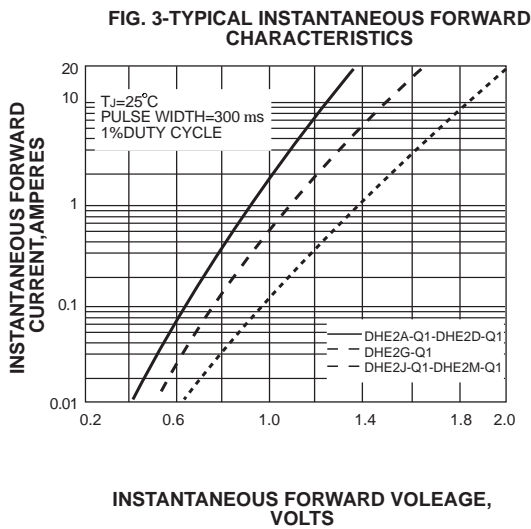
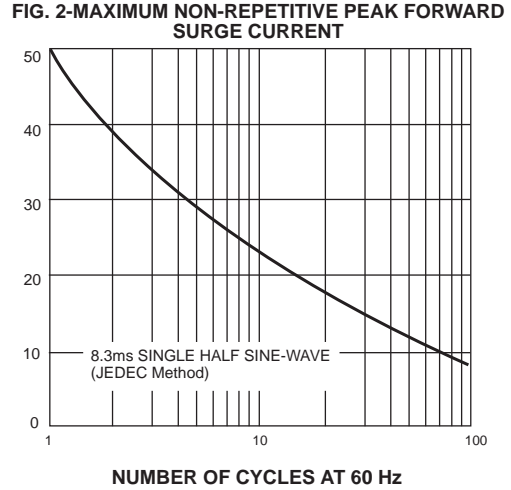
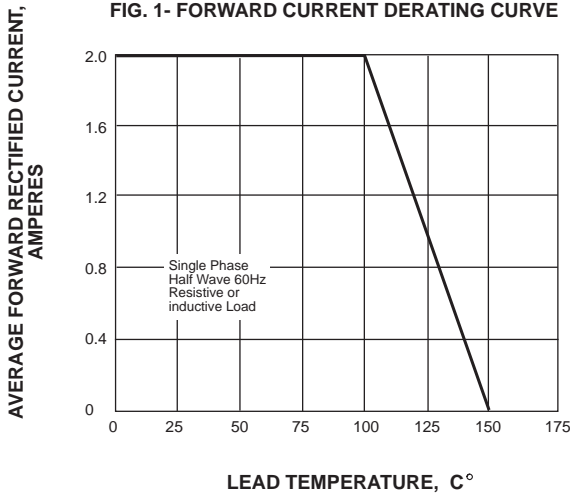
PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	$I_O$			2.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	$I_{FSM}$			50	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	$I_R$			5.0	$\mu\text{A}$
	$V_R = V_{RRM}$ $T_A = 100^\circ\text{C}$				50	
Thermal resistance	Junction to ambient NOTE 1	$R_{\theta JA}$		75		$^\circ\text{C}/\text{W}$
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	$C_J$		20		pF
Storage temperature		$T_{STG}$	-55		+150	$^\circ\text{C}$

SYMBOLS	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	$t_{rr}^{*5}$ (ns)	Operating temperature $T_{Jr}$ ( $^\circ\text{C}$ )
DHE2A-Q1	50	35	50	1.00	50	
DHE2B-Q1	100	70	100			
DHE2D-Q1	200	140	200			
DHE2G-Q1	400	280	400	1.40	75	
DHE2J-Q1	600	420	600			
DHE2K-Q1	800	560	800			
DHE2M-Q1	1000	700	1000			



- \*1 Repetitive peak reverse voltage
- \*2 RMS voltage
- \*3 Continuous reverse voltage
- \*4 Maximum forward voltage@ $I_F=1.0\text{A}$
- \*5 Maximum Reverse recovery time, note 2

**Note:** 1.P.C.B. mounted with 2.0x2.0" (5.0x5.0cm) copper pad areas  
2. Reverse recovery time test condition,  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$

### Rating and characteristic curves



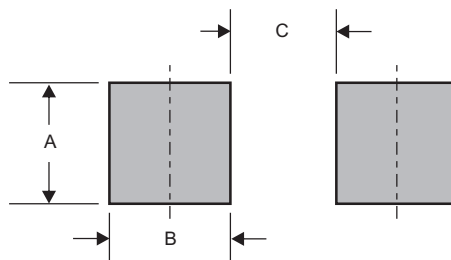
### Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

### Marking

Type number	Marking code
DHE2A-Q1	U2A
DHE2B-Q1	U2B
DHE2D-Q1	U2D
DHE2G-Q1	U2G
DHE2J-Q1	U2J
DHE2K-Q1	U2K
DHE2M-Q1	U2M

### Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.075 (1.90)	0.055 (1.40)	0.075 (1.90)