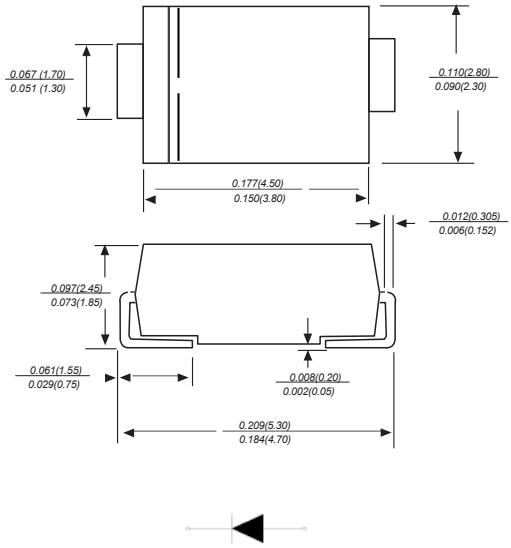
SURFACE MOUNT SUPER FAST RECOVERY RECTIFIER

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated
- placement High forward surge current capability
- High temperature soldering guaranteed:
- 250°C/10 seconds at terminals

Glass passivated chip junction

DO-214AC/SMA



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

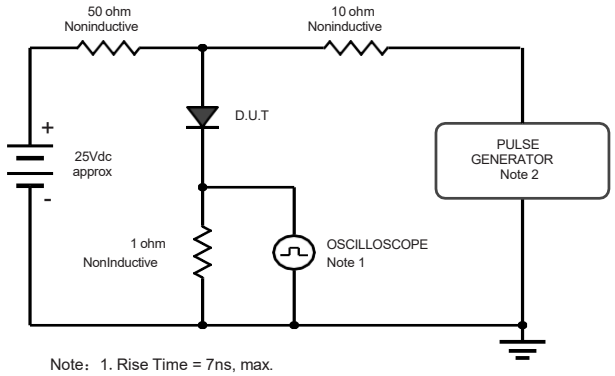
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current at Tc=125℃	$I_{(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	50							A
Maximum instantaneous forward voltage at 2.0A	V_F	1				1.25		1.68	V
Maximum DC reverse current at rated DCblocking voltage TA=25℃ / TA=125℃	I_R	5.0 / 100.0							uA
Maximum reverse recovery time (NOTE 1)	t_{rr}	35							ns
Typical junction capacitance (NOTE 2)	C_J	40.0							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	60.0							℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55to+150							℃

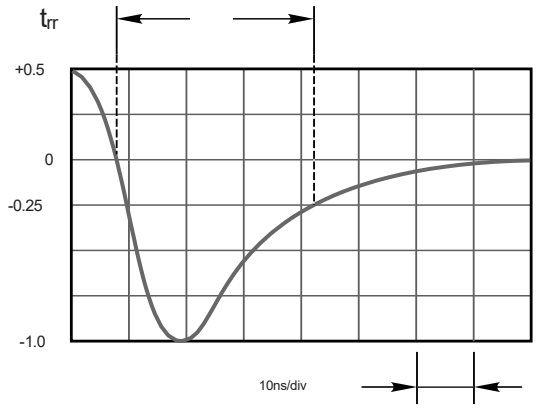
Note: 1.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Pulse test: Pulse width 200 sec, Duty cycle 2%
4. .P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

Ratings And Characteristic Curves

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note：1. Rise Time = 7ns, max.
Input Impedance = 1megohm,22pF.
2. Ries Time =10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

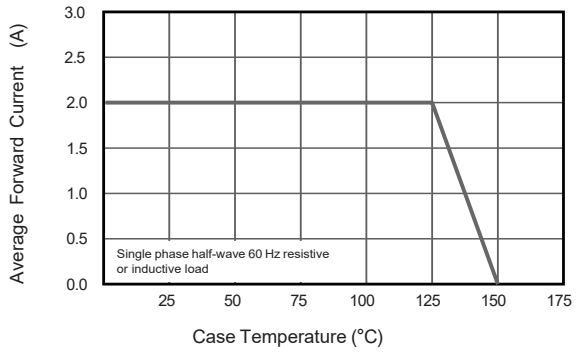


Fig.3 Typical Reverse Characteristics

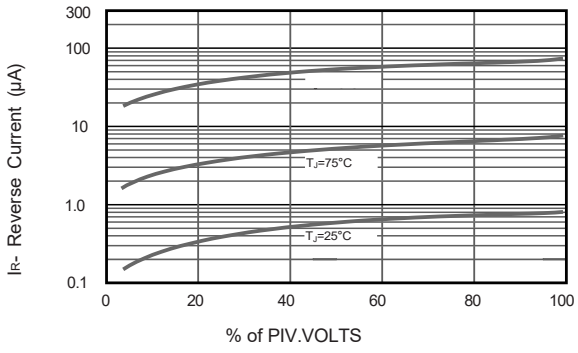


Fig.4 Typical Forward Characteristics

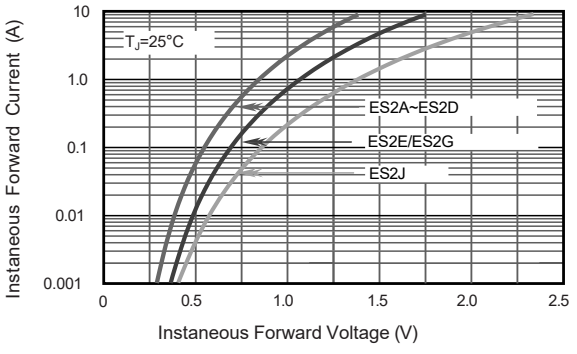


Fig.5 Typical Junction Capacitance

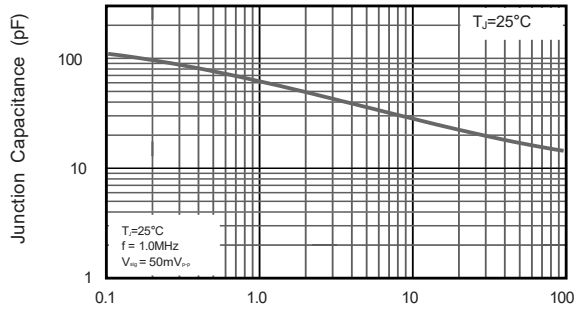
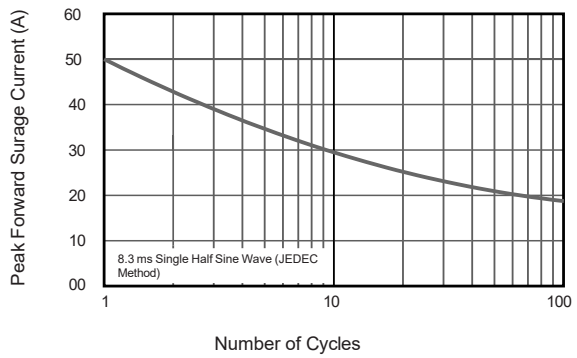


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current



curve above is for reference only.