

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

● **Applications**

General purpose detection  
High speed switching

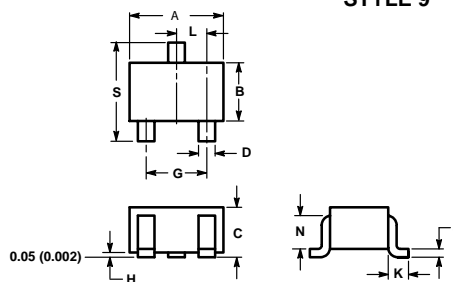
● **Features**

- 1) Small surface mounting type (EMD3, UMD3)
- 2) Low  $V_F$  and low  $I_R$
- 3) High reliability.
- 4) Lead Free Product.

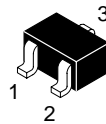
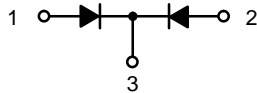
● **Construction**

Silicon epitaxial planar

(SC-70)  
SOT-323  
CASE 419  
STYLE 9



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.032	0.040	0.80	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017 REF		0.425 REF	
L	0.026 BSC		0.650 BSC	
N	0.028 REF		0.700 REF	
S	0.079	0.095	2.00	2.40



SCS715F Marking : JE,3D

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

● **Absolute maximum ratings** ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	40	V
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	30	mA
Peak forward surge current*	$I_{FSM}$	200	mA
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40~+125	$^\circ\text{C}$

\* 60 Hz for 1  $\mu\text{s}$

● **Electrical characteristics** ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.37	V	$I_F=1\text{mA}$
Reverse current	$I_R$	-	-	1	$\mu\text{A}$	$V_R=10\text{V}$
Capacitance between terminals	$C_T$	-	2.0	-	pF	$V_R=1\text{V}$ , $f=1\text{MHz}$

Note) ESD sensitive product handling required.

RATING AND CHARACTERISTIC CURVES (SCS715F)

● Electrical characteristic curves (Ta = 25°C)

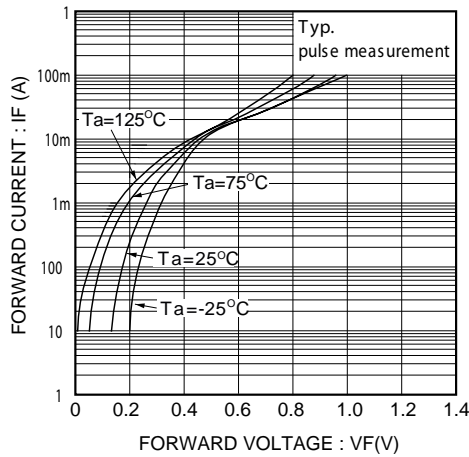


Fig. 1 Forward characteristics

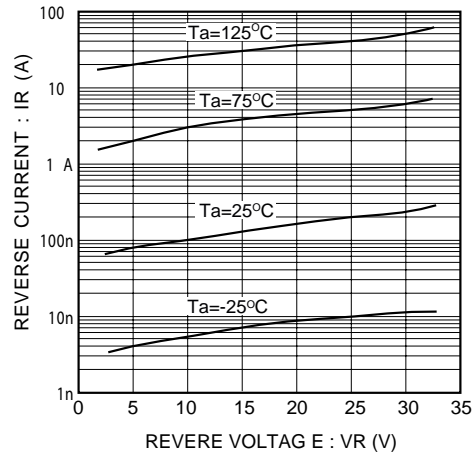


Fig. 2 Reverse characteristics

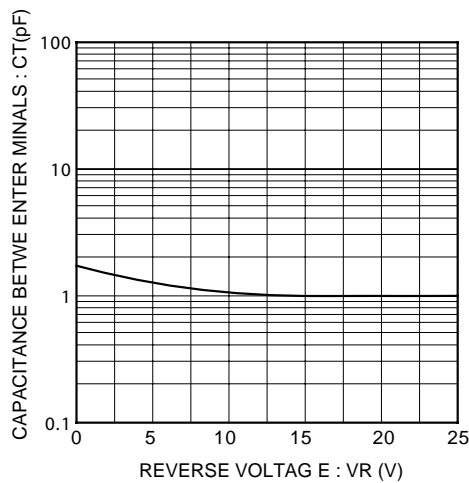


Fig. 3 Capacitance between terminals characteristics

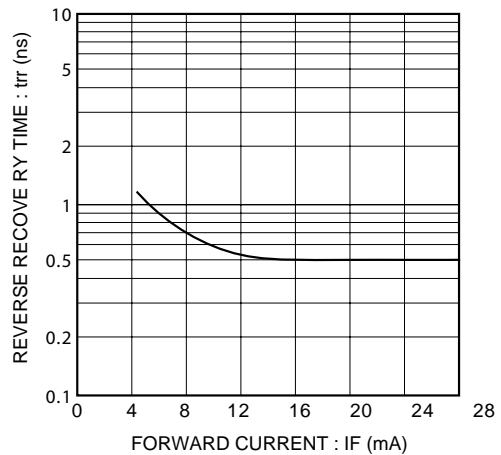


Fig. 4 Reverse recovery time characteristics

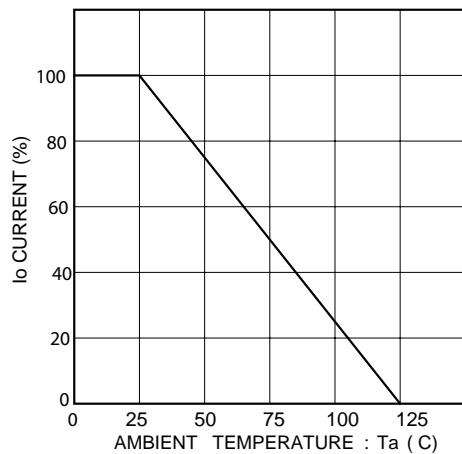


Fig.5 Derating curve  
(mounting on glass epoxy PCBs)