国晶微
GUOJINGWEI

FAST SWITCHING DIODES

LL4148

FEATURES

Silicon epitaxial diode

500mW power dissipation

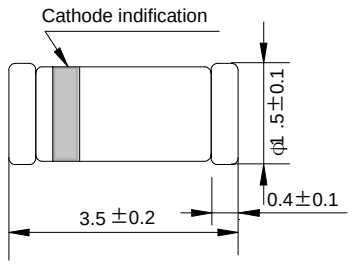
High speed switching diode

MECHANICAL DATA

Polarity:Color band denotes cathode

Case: LL-34 glass case

Weight: Approx 0.031 grams



LL-34(SOD-80) Dimensions in millimeters

Absolute Maximum Ratings (TA=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	75	v
Peak reverse voltage	V_{RM}	100	v
Average Rectified Current	IO	150	mA
Non-repetitive Peak Forward Current	I_{FSM}	500 1)	mA
Pow er dissipaton at tamb=25°C	P_{tot}	500	mW
Junction temperature	T_J	175	°C
Storage temperature range	T_{STG}	-55-175	°C

1) Valid prov ided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS (Tamb=25 ℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward voltage @ IF=10mA	V_F			1.0	v
Leakage current at V_R=20V	I_R			25	nA
at V_R=75V	I_R			5	uA
at V_R=20V T_J=150°C	I_R			50	uA
Capacitance at V_F=V_R=0V	C_{tot}			4	pF
Voltage rise when switching on tested with 50mA pulses tp=0,1uS , rise time＜30ns, f p=5 to 100KHz	V_{fr}			2.5	V
Reverse recovery time from I_F=10mA VR=6V,RL=100 ,at IR=1mA	trr			4.0	nS
Thermal resistance junction to ambient	$R_{\theta JA}$			350	K/W
Rectification effciency at 100MHz,V_{RF}=2V	η V	0.45			

LL4148 Typical Characteristics

AMBIENT TEMPERATURE

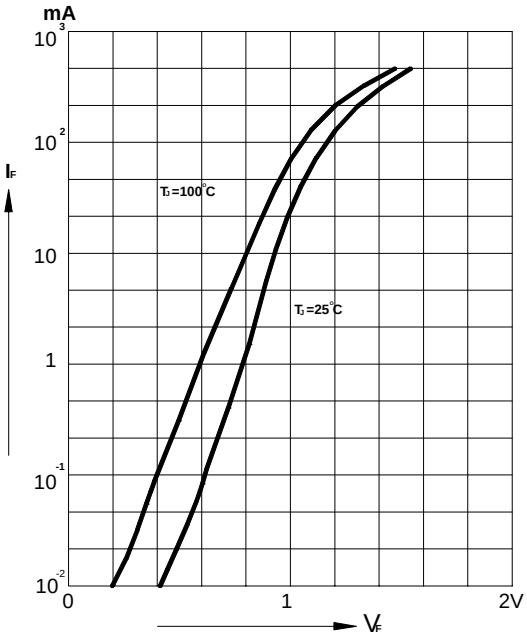


FIG.2– FORWARD CHARACTERISTICS

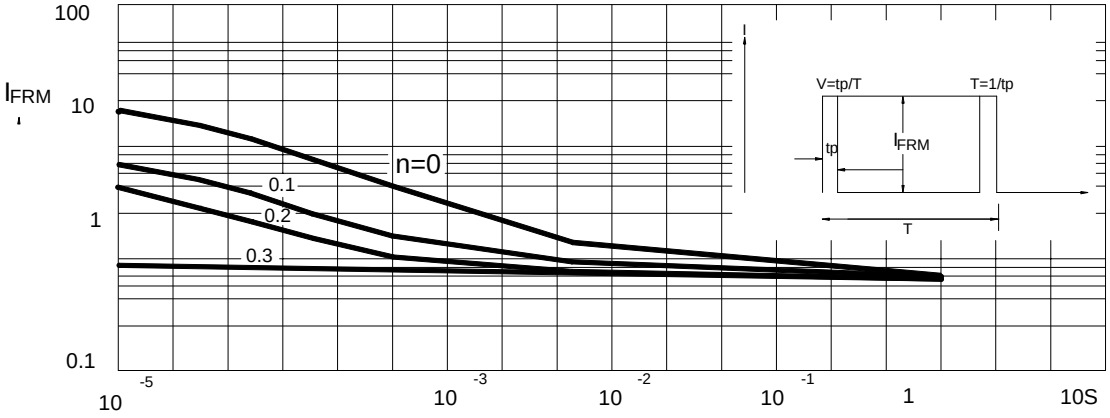


FIG.3-ADMISSIBLE REPETITIVE PEAK FORWORD CURRENT VERSUS PULSE DURATION