

Features

Glass passivated junction
Plastic package P-600
Un-directional
Very Low Clamping Voltage
High temperature soldering guaranteed: 265°C/10 seconds/.375", (9.5mm) lead length, 5lbs., (2.3kg) tension
Continued current transient suppressor
RoHScpliant
4KW peak pulse power capability on 10/1000us waveform
Operating Junction and Storage Temperature Range is -55°C to 175°C
AEC-Q101

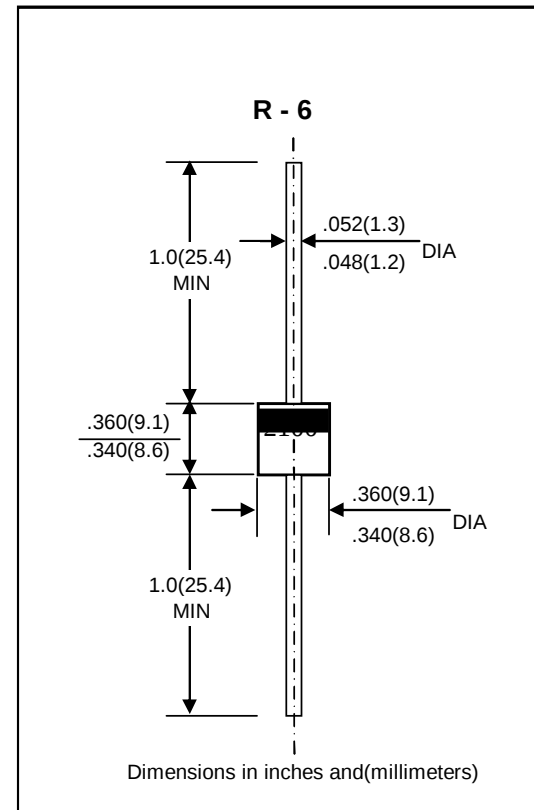
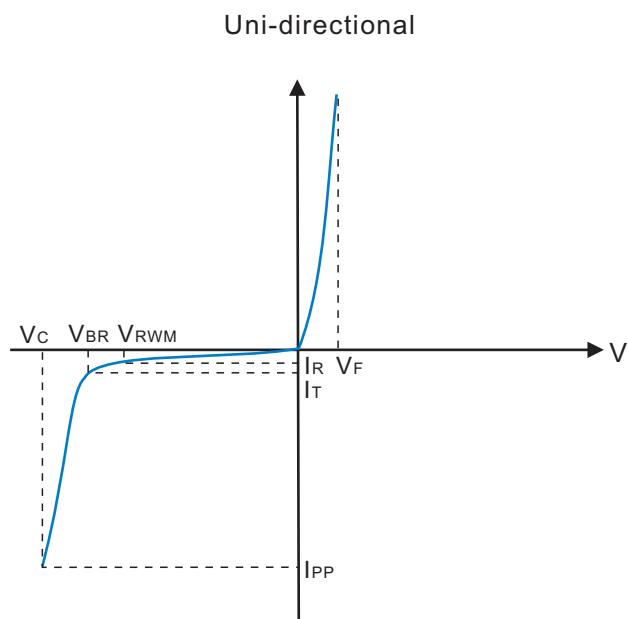
IEC Compatibility

ISO 16750-2 Test A 12v System (87V 2Ω 400ms 10c)

Applications

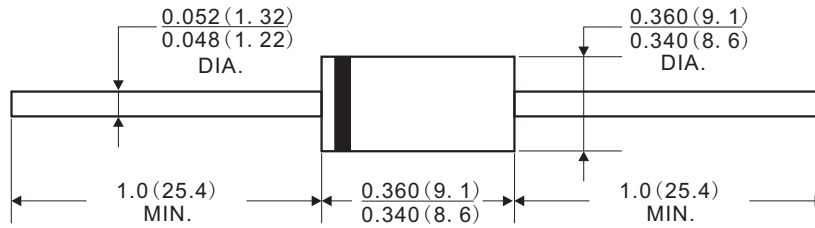
Auto powers system
Can-bus
ABS powers
Car audio and video
Automotive instrument
Bluetooth
Car GPS

I-V Curve Characteristics



Dimensions (P600)

Case Style P600

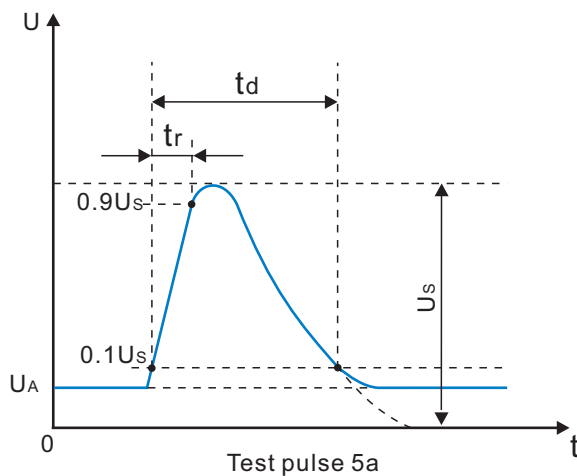


Dimensions in inches and (millimeters)

Electrical Characteristics

PKL Part Number	Stand-Off Voltage	Reverse Leakage @VRWM	Breakdown Voltage @IT		Test Current	Max. Clamping Voltage @Ipp 10/1000μs	
UNI-Polar	VRWM(V)	IR(μA)	VBR(V)Min.	VBR(V)Max.	IT(mA)	Vc(V)	Ipp(A)
PKL22A	22	2	24.0	26.9	5	35.5	112.7
PKL33A	33	2	36.7	40.6	5	53.3	75.0
PKL36A	36	2	40.0	44.2	5	58.1	68.8

Test ISO 16750-2 Test A



Parameter	12V System	24V System
U_s	79V to 101V	151V to 202V
R_i	0.5 Ω to 4 Ω	1 Ω to 8 Ω
t_d	40ms to 400ms	100ms to 350ms
t_r	$(10^{0}_{-5})ms$	

Ratings and Characteristic Curves (TA=25 °C unless otherwise noted)

Fig.1 Peak Pulse Power Rating Cure

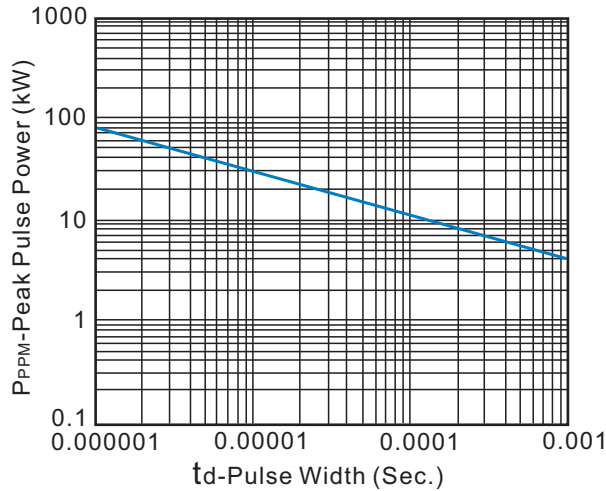


Fig.2 Typical Junction Capacitance

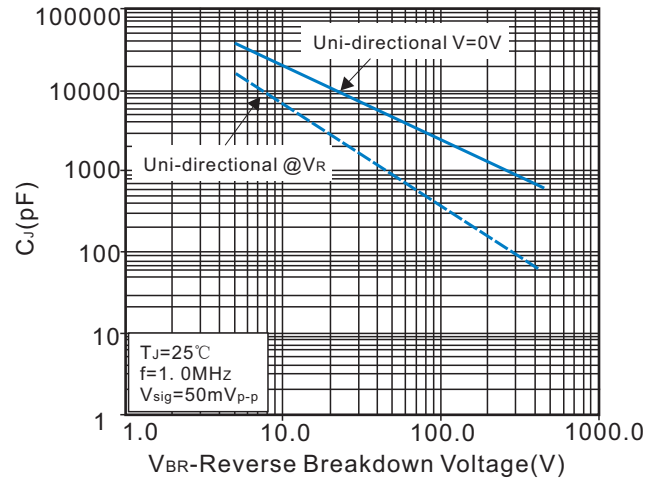


Fig.3 Pulse Waveform

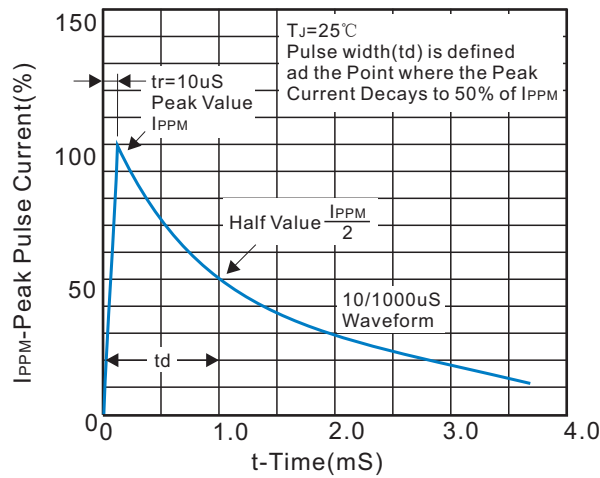


Fig.4 Maximum Non-repetitive Forward Surge

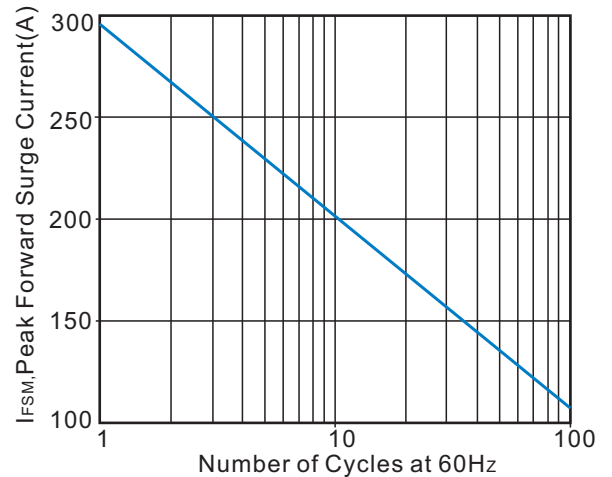


Fig.5 Ri-Vs chart for ISO-16750-2 Test A : 12V System

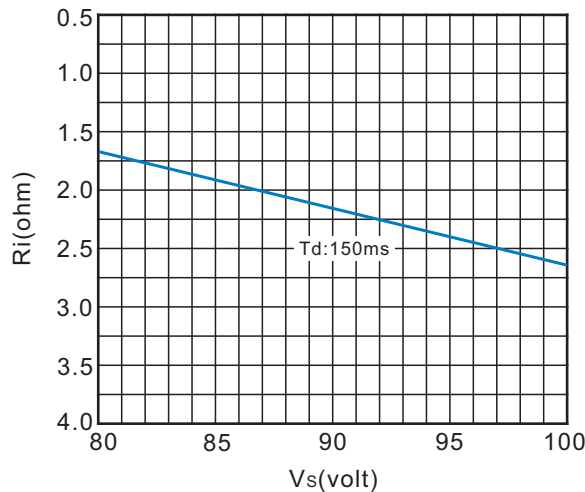
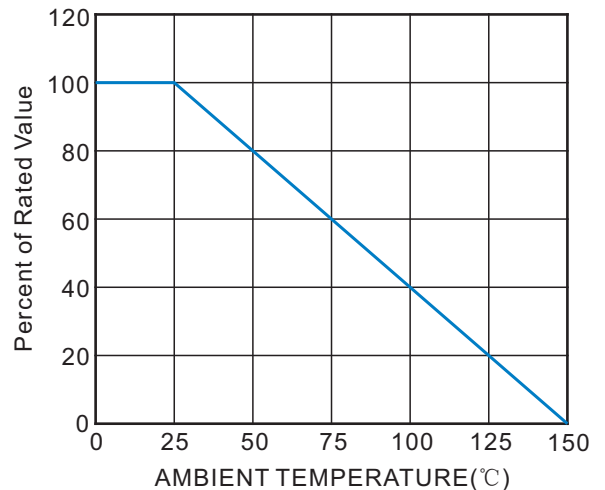


Fig.6 Power Derating Cure



Recommended Soldering Conditions

Recommended Conditions

Reflow Condition		Pb-Free assembly (see Fig.1)
Pre Heat	-Temperature Min($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time(Min to Max)(t_s)	60-180secs
Average ramp up rate (Liquidus Temp(T_L) to peak)		3°C/sec.Max.
$T_{s(max)}$ to T_L -Ramp-up Rate		3°C/sec.Max.
Reflow	-Temperature(T_L)(Liquidus)	+217°C
	-Temperature(t_L)	60-150secs
Peak Temp(T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp(t_P)		30 secs.Max.
Ramp-down Rate		6°C/sec.Max.
Time 25°C to Peak Temp(T_P)		8 min.Max.
Do not exceed		+260°C

Reflow Soldering

