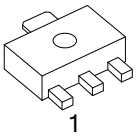
2SD2212

Preliminary | ***NPN SILICON TRANSISTOR***

HIGH GAIN AMPLIFIER TRANSISTOR (DARLINGTON)



SOT-89

■ FEATURES

* Built-in zener diode between collector and base
* Strong protection against reverse surges due to "L" loads
* Built-in resistor between base and emitter
* Built-in damper diode

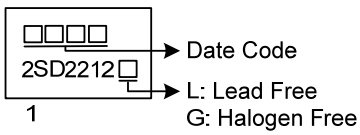
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SD2212L-AB3-R	2SD2212G-AB3-R	SOT-89	B	C	E	Tape Reel

Note: Pin assignment: B: Base C: Collector E: Emitter

2SD2212G-AB3-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AB3: SOT-89 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	2	A
Collector Current (Pulse)	I_{CP}	3 (Note 2)	A
Collector Dissipation (Note 2)	P_C	0.5	W
Junction Temperature	T_J	+150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.
2. Single pulse (P_W) =100ms.

■ ELECTRICAL CHARACTERISTICS (T_A = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	V_{CB}=40V, I_E=0			1.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V, I_C=0			3.0	nA
DC Current Gain	h_{FE}	V_{CE}=2.0V, I_C=1A	1000		10000	
Collector to Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=1.0A, I_B=1mA			1.5	V
Gain Bandwidth Product	f_T	V_{CE}=5.0V, I_E=-0.1A, f=30MHz		80		MHz